Notebook Series -- Notebooks by Edison and Other Experimenters
Disc Record Book No. 9
Notebook, N-16-03-01

This notebook is a continuation of N-16-02-25. It was used by Edison during March 1916 for notes on experiments to improve varnishes and schedules for transfers, as well as efforts to eliminate problems with record edges and cracking. There is also one notation by an unidentified experimenter. Included are notes describing a sequence of experiments numbered from 431E to 478E. Many of these entries involve different applications of heat and pressure during the transfer and printing processes and usually provide a tally of acceptable and unacceptable transfers. Other entries relate to the shapes and edges of transfer plates and record molds. Some notes are in the form of instructions to Sherwood T. (Sam) Moore or other employees. At the end of the book are several rough drawings of molds and presses. The front cover is labeled "Disc 9." The pages are unnumbered. Approximately 170 pages have been used.

Get rid of the thick + thin var at Edge — make it even then squeeze checks will disappear with it long Margin Cracks —

To stop pull outs Cure 5 to 7 minutes more in transfer press —

431 E

Reduce the diameter of 12 1412 blanks 1/8 of an inch and Transfer 12 of these blanks with 387 varnish plates, 60cc

Use regular transfer schedule except only use 300 + 20 minutes hold pounds.

Print them all — at 600 lbs pressure

(1 free OK
(2 / OK

(1 free OK
(2 / OK

(1 free OK
(2 / OK

(1 free OK
(2 free OK } slit C.C.

(1 2-2" OK
(2 2-2" OK

(1 free OK
(2 2-6" OK big springs

(1 free OK
(2 / OK

(1 2-3" OK
(2 1-2" OK } Red Coulter slight

(1 2-3' OK
(2 3.6" — Crack parallel near edge

(1 1-3" OK
(2 3-6" OK

(1 2-3' OK springs checks
(2 2-4' OK

(1 2-2 OK ~~springs~~
(2 1-3 — long crk parallel at margin

(1 / OK
(2 / OK } springs Checks

1 1-2" OK } except red Centers ok
2 2-3 OK }

1 1-3 OK } Red Centers
2 2-3 OK }

1 2-3" OK
2 1-4" OK

1 1-2" OK
2 4-6" OK

1 free OK
2 free OK

1 1-2 OK Red Centers
2 1-3 OK

1 free OK
2 1-2" closed Crack ? ?

1 free OK
2 free OK

1 1-2 OK
2 4-6" OK

1 free closed Ok ?
2 1-2" Closed Ok ?

1 1-2 OK } Red Centers
2 3-5" OK }

1 free OK
2 2-2" closed OK ?

432E

Transfer 12 1412 blanks
Reg Schedule Except
300 lbs pressure Use 387 + 20 minutes heat
Van 60 cc

Turn down the transfers so they are 1/4 of inch less in diameter —
Then permit them all on ~~[illegible]~~ tracked moulds regular schedule except 600 lbs pressure

This looks as if we wanted the Edge, say 010

433E

12 Reg plates Cut flat no Edge — Reg Vari 60c

Transfer 1412 blanks —

300 pressures 20 minutes

(1 free — OK
(2 free OK CK parallel at Edge 1" long well Edge off

(1 free — Ckd around Edge - red Edge Var them on Edge
(2 free " " "

(1 free " " "
(2 free " " "

(1 free " " "
(2 free " " "

(1 free " " "
(2 free " " "

(1 free " " "
(2 free " " "

Edge to not clean them up + permit 600 ~~day~~ lbs —

Nothing could be better for free release to perfect

434E

5 Iron $\frac{1}{4}$" plates –
Transfer on 1412 blanks
300 pressure – Hold
20 minutes, Req Vac 60 cc

Print

2 Cast iron plates free release, margin
cks near edge of blank, in 2 places went in to
far to clean up – not bad cracks but
fine check cracks.

Steel of same size of blank showed
check cks 1/16 in some places 1/8 no weld
1/16 off the edge as no Varnish

~~Steel~~ Steel showed up more
favorable (10) plate size of blank
shows up better than the plates
1/4 larger Diameter –

We are now trying to find a schedule in transferring that will heat & Cure the transfer without Cooking & without flowing it until it gets to a heat & curing that it will flow without Cracking Crushing or squeezing & mucking meatte Effects —

1st 100 lbs press. & heat 14 min — Cool & Examine — it Cooked too much

Try another lot and heat 14 min at 125 lbs pressure & Cool & so on advancing 25 lbs at Each Experiment, until a good point is reached

Then put in new lot & hold 14 minutes at that pressure & then put on 300 lbs ~~of~~ 3 @ 5 min & prut — Freezing 38° & Reg Var both at same time

387 =

(1/2 - Cooked + ckd in Cook } no marqu cks
5" red - ckd - not cooked

(1/2 cooked 6" ckd bind - no bind - "

(1/2 " " " Pull out " 1/2 of

(1/2 " " no " " then free

(1/2 " " " " " release

(1/2 " " " no PO " " often stick

(1/2 " " " no PO " "

Reg Var

(1/2 cooked bad ckd no marqu cks or PO -
" "

(1/2 nearly ok black but closed cracks no PO or Marqu
" both free release "

(1/2 free 2 1/2 rd free Release, no marqu
free 5 Red

(1/2 {Badly Cooked almost to Edge free
no po or cks at Edge

(1/2 Cooked bad - free release no po or marqu cks

(1/2 free release - bad cooked no po or "

Reg Var cooks bad + some run nearly to marqu while 387 had have 2 to 2 1/2 good marqu or not badly cooked like reg.

435 F Note 387 Best here

6 387 60 cc Var Plates
6 Reg 45 cc "

Run to 100 lbs pressure + 100 lb clean - Keep it at these points for 14 minutes hold both points + Cool - note appearance of transfers -

Thermometer shows went to
250 deg in 3 minutes
280 " 4 "
300 " 5 " most of equilibrium
318 " 8 " takes place in
320 10 " 4 minutes -
320 11 "
320 12
320 13
320 = 14. Cooling

	Cooling	
1 min	306	387 60 cc
2	260	
3	212	Shows up best
4	172	
5	140	Except on free release
7	110	perhaps it would show up better with 45 cc

			Diff between highest & lowest
215	222	7	009
213	221	8	
217	224	7	007
218	223	5	
210	218	8	017
222	227	5	
218	221	3	006
215	220	5	
221	227	6	011
225	232	7	
223	220	3	007
216	216	0	
218	222	4	009
213	216	3	
216	219	3	007
220	223	3	
221	214	7	008
222	218	4	
213	206	7	014
220	213	7	
226	220	6	011
220	214	5	
219	217	2	008
213	211	2	

436E

Hoffman make 12 1412 blanks but give them 1500 lbs pressure instead of 1000. Calliper before & after

223
221
218
210
217
215
218

220
227
223
213
217
225
216

215
222
218
221
218
232
216

223
222
224
218
221
227
220

Req Var on unwarmed 1412 Blanks

1 free Bad Cooked — OK otherwise
2 "

1 free one bryanna cooked
2 hard other side only little — "

1/2 free - only bruce cook both sides — "

Req Var on 1412 Vacuumed Blanks

(1/2 free - Cooked (ckd) - Cook — otherwise OK
(1/2 " "

(1/2 free Cooked on slightly marg OK — "

(1/2 free - Cooked Bad - ckd on Cook — "

437 E

Drop of 435

Except pressures increased from 100 to 125.

Starts squirting out 130 at 140

its squirted way out

3 - of 387 · 1412 blanks without weld Var

(1 6" Red not cooked free
(2 6" " " pulled out - hard release

(1 6" " Cooked — No PO or Marqu Cks on these 3
(2 6" "

(1 free & clean 6" only little Cooked
(2 not very free 6"

---

387 ~~3~~ 3 with weld Var

1 Bad Cooked ckd * No weld — no marqu cks or PO
2 " "

1 Hard Release 6" one not cooked — "
2 " " 6" other Cooked

1/2 Neither Cooked 3" Center — "

5 = 387 –

(1 = 6" Red no weld pulled off – Otherwise OK
2 6" " " "

(1 free
2 Hard } Cooked, 6" cooked ckd "

1 free
2 Hard } Cooked – 1 hard "

1 Little free Cooked a little ckd in Cook "
2 Hard " only little

1 free
2 Hard Cooked 6" pull off in Cook "

No gain over 100 pressure

---

1 free only little Cook Reg V otherwise OK
2 release

1 Horrible Cooked free R. "
2

1 free } almost OK few spots Cooked "
2

1 free } almost OK " "
2

1 free – Cooked some "
2

437E

Dup of 435 Except use 150 lbs pressure –

6 of 387 Var 60 cc
6 of Reg Var 45 cc

In top mould between mould & plate put on both sides a Label ~~of~~ 387 – then 5 Reg 387 plates

On bottom mould between mould & plate put Labels ~~of~~ use Reg Var & then 5 Reg Var plates –

Top – Label 387 Var – free release not cooked – 4 @ 5 Red – OK –

Bottom Label Reg Var nearly OK cooked only in few spots – 387 was best –

The labels help but not big Enough –

438E

150 lbs pressure

Req Var 4500

2 1412 blanks with flat plates of req Var on - put them in 2 bottom places in press —

1 with piece of Tin 6" dia between Each plate & holder } 387 Var

2 with 1412 blanks that raise around hole has been filed flat on each blank. Req Var

2 with 1412 blanks, that raise is filed flat, use 387 Var

1 with 2 latels between plates & moved Req Var

1 ditto 387

1 with Req V 2 pieces Tin between Mt & Plate

1 387 - 2 6" Grease

1 Req 2 6" Grease

2 blanks 387 Var Centers of blanks
filed down flat - 1412
1 free Cooked 6" stuck to Center otherwise OK
2 hard " " " "
1 free " " " "
2 hard
apparently no gain by filing down -

One 1412 - Tin between plate & mounted
6" dia - 387 Var - Tin .010 thick
6" of Center OK black good 1" of outer
OK - red ring ckd -
Other side OK except 2 or 3 fine radial
pull outs .010 near Edge of tin - OK - thus
Tin too thick - Pronounced
showing Red & Cooked Centers
Can be eliminated & transferred
needs at 150 pressure & probably
at 100 -

1412 - 387 Var Brass 6" .005 thick
between mounted & plate -
1 free release - OK
2 Very hard OK except 2 or 3 .010 pull
outs near edge of brass -

Special plate -

Flat plates Reg Var 60 cc - Concl -
1 grooved Edge free release - checks at grooves
2 without groove " Best + OK

1 free OK
2 free Concl OK check ¼ from Edge
These flat plates wants only 50 lbs pressure
& Check -

Reg Var 6" Brass
1 free OK
2 free - OK -

Reg Var - 2 reg labels on each side -
1 - Cooked beyond label OK will print
2 - " OK will print not red
1 free Cooked Little OK "
2 free " OK " not red

Reg Var - 1412 Tin 6"
1 free OK but cooked beyond Tin all around
2 hard OK but will print

---

2 1412 blanks Centers filed down
Reg Var -
1 free OK Cooked black but OK
2 free OK " " " OK
1 free OK

NOTICE

Probably best schedule is
2 minutes at 100 lbs pressure
by that time the transfer will
be squeezed as much as it
will squeeze + the temperature
will rise to not over
200 @ 220 or oven temp
that plates been baked at
there will be no Cooking
at End 2 min put on
200 or 250 or less —
by this method the ~~[illegible]~~ material
will be squeezed +
transferred at the lowest
pressure + no harm is
done —

Moore 9 =

24 blanks 1412 45cc Req Var -

3 min at Contact 100 lbs —
12 " " 300 lbs —

24 Transfd 20 OK 1 left 1 Cooked

91.6 %

Present 2 min Contact 3 at 200
lbs - 5 at 600 lbs —
Cooling very use long
Remedi — (Doubtful - Cooked)

~~Doubtful = [illegible]~~

Prints. (corner Extreme Edge Clip) (will Edge not Extreme Edge Clip Corner)
OK ||||| ||||| ||||| ||||| | —

21 printed 21 OK

Edges not crumbled — good

NOTICE

439-E

2 1412 blank. with Extra amount of weld Var in Center about 6" ✓
Use Req Var plates - 45cc

1 free } Cooked but Cornel OK
2 " "

1 free } Cooked rather bad but Cornel OK
2

2 1412 blanks with Extra weld Var in Center 6" use 387 60cc

1 free - slight Cook OK
2 almost free - OK

100% ✓

1 free } little Cook - but OK
2 almost free } OK -

2 1412 blanks with Extra 6" weld Var 6" Center fenter filed down
Use req Var plates

1 free } Cooked both sides - Discard
2

1 free Cooked Discard
2 free " Discard

43-q Continued

2 1412 blanks Extra 6" wide
Var Centers filed down
Use 387 60cc Var
(1 Hard / Cooked + Ck) - pulled out at hole
2 very hard " "

(1 Hard - pull out in music
2 very hard -
Hard to release

~~2 filed down 1412~~
~~blanks - Req 45cc~~
~~Var pickup~~ -
1 free Cooked may pull
2 free Discard
1 free Cooked Dis -
2 free - " Dis -

2 filed down Centers = 387 Var 60cc
(1 ~~Hard~~ 6" Red Centers Ck'd
2 Hard " " Ck'd -
(3 free - Red C. 2½" + ck'd
(4 ~~Cooled~~ ~~No Cooled~~

440E

150 lbs
14 mandrels

~~2~~ 1412 blanks with 6" Extra Varnish in Center -
Reg Var -
1 free Conical ok
2 free " ok
1 free
2 / " ok
ok -

2 = 1412 blanks 6" Extra Var in Center - 387 Var
(1 - free (pooled some crowded)
2 very hard) ng -
(1 cooked ckd lifted - NG
2 cooked ckd -

2 filed down Center -
Reg Var
1 cooked ckd ng
2 " "
1 free
2 free
Center ng
outside ckd Conical

2 filed down Center 387 Var
1 free 6" Rad C ckd ng
2 hard 6 " " ng
1 free 4" " " ng
2 hard 4 " " ng

2 - plain 1412 - brushed " Req Var
1 free slight Cooked ok Consol
2 free not " ok
1 free Lime fry - not ckd OK
2 free " " OK

2 plain 1412 brushed 387 Var
1 free nearly ok Ckd in Cenlin
2 hard Cooked red
1 free 6" Red not ckd OK -
2 "

nq -

387 is to thick & too high at Edges
to work on this schedule -

NOTICE

If 441 E had Double weld
Var (12) 6" Extra in Center
All would have been
OK I feel sure -
On its Equivilent
Could be done in the mould

441 E 200 lbs

12 1412 - Req Var platens - 45cc
press at 200 lbs, 14 minutes,
Free release ||||| ||||| ||
Hard ||
~~OK~~
OK Council - Red Center ||||| ||
Cooked Ck ||
Cooked not ckd
Discard ||

10 OK 2 Ckd bad Center

1 min + 55 second the Varnish
started to leave the plate

Think 2 men is OK but
may want 2 1/2 -

442 E

12 1412 blanks burnished
14 minutes at 250 pressure
Req Var plates 45 cc

free ||||
stick |||

OK ||||

Concl ||||1

Discard 1

Cooked Center Ckd 1

443 E

12 1412 blanks brushed

Reg Vacu platers 45cc

100 lbs pressure for 2 minutes

250 lbs for 13 minutes

Free 𝍸 𝍸 ||

Quick -

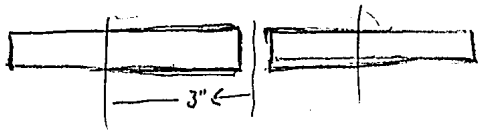
OK 𝍸 𝍸

OK Comal ||

Discard

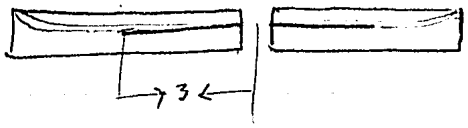
Cooked Centers

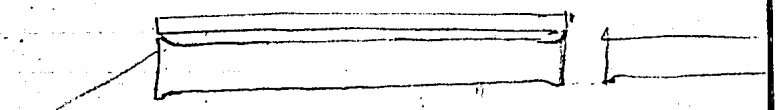
Moore is having Lichr
fix a Mould for Hoffmann



to make blanks to do away with
Red Cutters —

Also fixing a Transfer Mould
holder





Edge hei Ø20 for flat plates.

4442

Make up 200 — 45cc
387 Varnish plates

445 E

Make up 200 Req Vial
plates 60 cc

Record of 446 E Transfers

96 — OK 76 — 6 Cooked Coulée
1 defect ckd 3 thin margin red on opposite side
10 Cracked Varnish —

300 lbs

Prints =

Cooked Transfer - not good enough 1

Poor print Edge ~~[illegible]~~ IIII 1

Ckd ½" long near Edge 11

Depressions dont print IIII IIII

poor print near label due to Cooked C 11

OK 1

poor print Music III
opposite dotted

Thru 2 mm Contact
2 " 300 lbs

If Var was even + no depressions
or Cooked Coulée, 75% of above
would be OK = but think it a
little too low a pressure to take care
of uneven blankets if we get transfer good

Think 400 minimum pressure had 3 mm!

446-E

Transfer 96 Reg Var plates
45 cc on 1412 blanks brushed

Transfer on this schedule
2 minutes at 100 lbs
13 " at 250 "

Cool — Reg —

Print ~~[illegible]~~ Use following schedule

A
12 at
2 Minutes Contact
2 " 300 lbs
will reprint this at 500 —

B
12 at
2 mm Contact
2 " 400 lbs

C
12
2 mm Contact
2 " 400 lbs

D
12
2 mm Contact
2 " 500

E
12
2 mm Contact
2 " 600 lbs

400 lbs 2 Contact
2 400 lbs –

Cracked one side

Cancel print Nearly full print 1

pp print Edge opposite side 1111 1111

pp due to Red Cent 111

Spots in plate nearly printed out 1111

full print 11

Chd ¼ Extreme Edge 1111

Long Ch very Extreme Edge 1

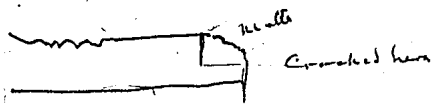
pp in Music both sides opposite 1

With present plates Ray Var
press
500 is probably necessary

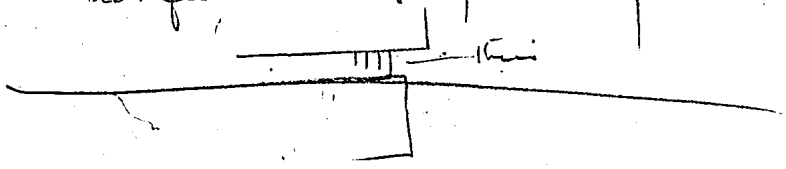
Thus is a better lot for printing than 300 lbs

Uneven blanks or Var + plate spots are main troubles

Cracks are of no Consequence probably was in transfer — no harm in extreme Edge



Thus looks that if Var free it could not flow out Except by Cracking



Reprinting a 300 pressure 446 with 500 lbs still there is 5 poor prints opp sides — 4 Discard for spots not printed out + bad Cracks not in first print 2.

Without have better surface to plates + no Cracked Centers Cannot print at 500 but if we have good plates Even blanks 007 – + no depressions We can print them + only lose a poor print now + then which can be reprinted

B =

1 Stuck	Cooked	Ckd	1 free	cooked	Ckd
2 Stuck	Cooked		2 stuck	"	
1 free	Cooked	Ckd	1 free	Red	1 Ckd at hole small
2 Stuck	Cooked		2 free	Red	

C 1 free OK This is a success on 50 cc
2 free OK

447 E

Transfer 7 = 1412 blanks Grouched

50 cc 387 Var plates

150 lbs pressure 2 min
350 lbs " 20 min

A

1 free	Cooked	Crouched	1 free	OK	
2 free	Cooked	—	2 free	OK	
1 free	Cooked	Ckd	1 free	OK	
2 Stuck	"	Ckd	2 free	OK	
1 free	Red C	OK	1 free	Red C	Ckd
2 free	Red C	OK	2	Red C	
			1 free	Cooked C	Ckd
			2 free	" C	"

B 4 - 387 Var plates 60 cc
Same schedule

C 1 High plate, Use 387
50 cc Var plates.

A. Hoffmann's 15 oz pressure blanks -

1 free	Slight red	OK
2 free	"	chd near hole -
1 free	"	≈ near center
2 free	"	OK "
1 free	"	OK
2 free	"	OK
1 free	Cooked	OK
2 free	Cooked	chd
1 free		OK.
2 free		OK.

NOTICE

Note before on req 1412 all tempered cooked or all cracked

On hard blank nearly all OK + slight red.

B - Brass 6"

(1 free	Very slight red	OK
(2		OK
(1 free,	no red c	OK
(2		OK
(1 free	slight red beyond edge of [illegible]	OK
(2 Slick fancy		OK
1 free	no red	OK
2 Slick hard		OK
1 free	no red	OK
2 free		OK
1 free -		OK
2		Red with center chd

NOTE Brass slops Cooking

448E

Transfer - 50cc 387 plates 1412 blanks brushed

C = 1 High pt mould holder

A 5 with Hoffmann's 15 oz pressure 1412 blanks brushed " 50cc 387 plates =

6 with 1412 brushed blanks 50cc 387 v plates with 6" brass discs between plates & mould.

Schedule

150 pressure 2 min

~~300~~ 350 " 20 "

C 1 free - Red 6" OK -

2 Slick. Red 6" OK

Note 60 cc cannot be cared for by this only 50 cc as 60 runs towards Edge

446 –

Print at 2 mm Contact
50d at 2 "

OK 1

Spot dont print out 11

Discard

Cracks Discard 1
Right angles

OK print 1111 111

p print + opposite 111

Ck parallel ½" 1

With four transformers this will be OK. poor parallel are easily 2 edges P parallel

Cooked Centers shows that ^^^ are due to Contact between a raise + a weld + is def of contraction between Cured + uncured Varnish, + while it is afterward black its origin was a Cooked raise

The Father of Cracks in Music is Cooked Transfer in Early Ages,

NOTICE

It looks as if 4 min Contact was better than 2 because Improved % of good prints — as it takes 5 min for press to reach 300 we should use 5 min Contact + not 4

Mica might even be better as blank would be softer + get rid of Pressure

446 -

Print Reg Var 45CC 1402

4 minutes Contact
2 " at 400

Note rise from 2 Contact to 4 Contact,

Faces

Poor print ||||
face - poor print |
Spots not pressed out ||||

Not ck'd faces ||||||
Ok prints ||||

Slight Poor Print Concl ||||||||

Ck'd | probably due to Cooking in music

Slightly poor print |

Cracked Pkg radial on margin ||| not in music

feed hitch |

NOTICE

In Printing The Contact should be 10 minutes at least as Moores Experiments shows that 5 min only gives 280° Fahr & it took 7 minutes to reach 303,

We should have this time which will not change & is a Constant for our process — Then the Blank will be soft Enough to give a little under say 400 lbs to ensure more full prints, than if blank was Colder & would not give any Even 1 min should be Enough To Print,

It is a question if we should not take pressure off when platten reaches 130

NOTICE

Moore put in some Rag transfers in press & heat to Contact for 3 min – part printed & part didn't – The part that printed actually blistered up against mould & printed Certainly We don't want this –

So in my Experimenting to night I am going to use 6 min at 100 lbs to stop blistering up – 2 minutes 400 lbs –

Also – We have put tits on the print moulds & this Exprint shows they do not go into blank ½ ways at Contact hence this has changed our old ~~results~~ results adversely as blank veneer now must Crack up awful it actually pulls away from blank

449E

Print –

6 min ~~Contact~~ 100 lbs

2 min at 400 lbs

6 Transfers 50 cc 38% Var 6" Brass plates

5 Transfers Hoffman 1500 lb pressure blanket

1 High mould transfer

SEE OVER

449 E

High mould ½ full Edge Cracks
This was bad transfer to start with

Brass discs
½ Ckd horribly on Edges -
½ No use -

NOTICE

Putting 100 lbs pressure on blanks before warming up to softening points gives horrible Margin Cracks — it is cause of them from high Edges which on pressing does not come to follow lines of least resistance & go outward -

1500 pressure blanks

Hopeless Margin Crack poor prints also - blank hard

NOTICE

We must heat print blank some how to at least 150° Fahr all over = Edges particularly. Before ANY pressure is put on otherwise we will have Margin & feed line Cracks -

We must have Uncooked Transfers so whole face of Transfer is equally Cured to prevent diference of Contraction & Cracks

A - Brass Discs —

(1 free OK
(2 Stick OK

(1 free OK
(2 free OK

(1 free OK
(2 / OK but has several small extreme Edge fine Cks

(1 free OK
(2 free 2 angle Cracks 30 deg 1/2" long fm Margin of mica running into mica —

(1 Margin Cks both ends + yellow Cks - blank cracked + Var forced —
(2 " "

(1 (Pressed up between Edge of brass + Edge —
(2 OK - blanks cracked open then came together or nearly made closed Cks

Copper Disc

(1 free OK
(2 Stick - OK

(1 free OK
(2 Stick OK

(1 free Crack nearly all way round Edge Copper
(2 free OK

(1 free - cracks " " "
(2 Stick - OK

(1 OK
(2 OK

High Mould 1 OK
2 OK

450 E Transfer

Schedule

100 lbs pressure 2 min —
300 " 20 min —

1412 Grams to Cavity

A 6 of 50cc 387 var
with Brass plates.

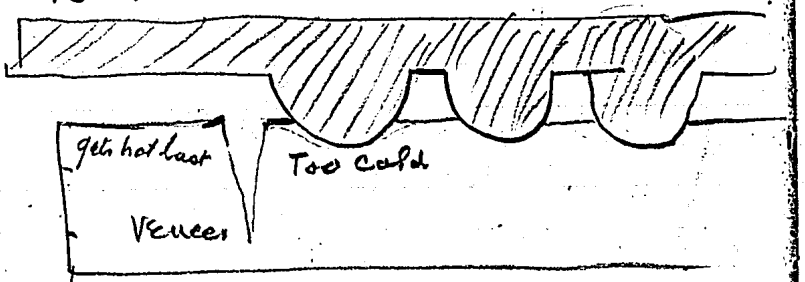
B 5 of 50cc 387 var -
with Copper Discs

C 1 High mould 50cc 387

Schedule N G - Must have it heated before transfer pressure goes on This means a Baked blank —

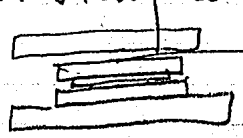
NOTICE

1/2 of them feed line cracks
Examined by Micro –
it is undoubtedly due
to this –



Blank

It can only get hot thru
tits, & must occur with poor
forms, it is pressed too cold
Must not bring in Contact
till



formly cause
of the cracks
in epoxi

Top of mould
has been at
150 for 3 or 4
minutes & Veneer is
soft –

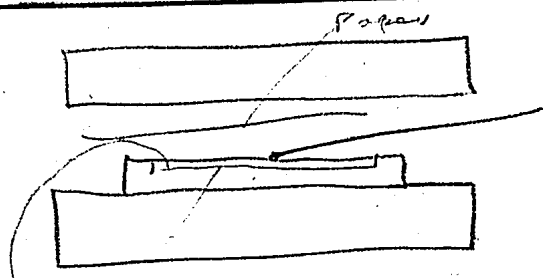
451E

Took Reg forms
Printed 12

100 lbs pressure 1/16 off pin
for 3 min steam already on
plates. then mould put
in – Think this may
shunt pins –

Should have steam on platen
& hot then determine time
it takes to reach 200 on
the mould holding then
put pressure on –

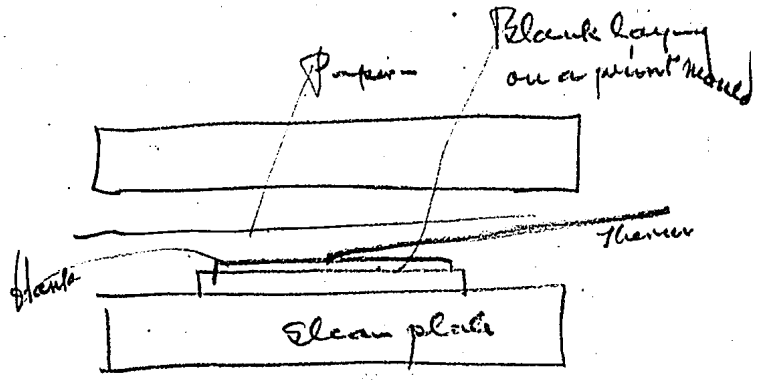
Examined & found this OK



no Blank - on hc
printing Mould

Steam off -	100° Fahr
1 min	110
2	140
3	175
4	210
5	236
6	258
7	273
8	285
9	295
10	302
11	309
12	314
13	318
14	322
15	324
16	327
17	327
18	330
19	332

End



Steam off	100° Fahr
1 min after Steam on	106
2 "	112
3 "	128
4 "	148
5 "	162
6 "	195
7 "	217
8 "	238
9 "	252
10	264
11	274
12	281

ok to put pressure on

Record -

T 1 OK -
B 2 Margin Cks fine - Discard

T 1 margin Cks very fine } Discard
B 2 " " "

T 1 full " " } Discard
B 2 " " "

T OK } Discard
B margin CK very fine

(T Larger margin CK } Dis
(B margin Cks very fine

(T OK } Dis -
(B margin larger

(T OK OK
(B OK

T larger long margin Cks } Dis
B OK

T OK
B very fine margin cks } Dis

T OK
B larger margin cks } Dis

T full line + very very fine margin cks } Dis
B OK

T OK
B larger ~~fine~~ margin Cks } Dis

	Top	Bottom
	7 OK	3 OK

	Top cks		Bottom cks	
	Large	fine	Large	fine
	//	///	///	///

Probably not hot enough - we try a 7 min heat -

452 = Printing 1412 Blanks

Special Experiment

12 Reg Transfers ≠

Schedule -

Start with no steam Room Temp

5 min heating - no contact

(Therm between bottom + ~~top~~ moulds on side showed 180°

1 Minute 100 lbs pressure
2 " 600 " "

Cool - when Therm only between moulds reached 125° Fahr which took 4 min - took off pressure -

Note this

(1 T poor print feed line ck } opposite -
(2 B " " "

(T feed line - another feed line - Marqu cks at p print
(B " " " p print } op

(T faint p print } opp Extreme Edge cks
(B

(T crinched blank 1/8" Edge yellow, also fine ck parallel at another point
(B OK OK

(T wavy ~~~ marqu ck
(B faint music print

(T OK OK
(B faint long marqu cks

(T Extreme Edge ck - faint music
(B ~~~ marqu ck - feed li cks

T Several marqu cks extreme Edge
B Blotch - feed line - marqu ck

T OK OK
B shook Extreme Edge Marqu cks

T very small Extreme Marqu cks
B Extreme marqu cks blotches

T OK OK
B Extreme Edge zinnat Marqu cks

T OK except a crack OK
B marqu cks

Top OK Bok
IIII I

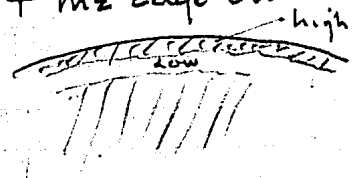
100% Bad

$452\frac{1}{2}$ E
Dup of 452E Except heat 7 minutes heat before Contact,

Evidently This theory does not account for Edge Marqu or feed line Cks —

NOTICE

New theory is that there is a low placed between start of music + the Edge on Transfers,



+ the pressure on high Edge Cracks the low

Record

OK Correct
11 1111

[T OK
[B OK

[T ½" from margin ½ crack Correct
[B OK

[T OK.
[B fine feed line –

[T OK
[B ½ from Edge very fine crack Correct.

[T OK
[B 1/16 from Edge ½ cks —— Correct.

50%

[T OK
[B OK

[T OK
[B 2 feed line cks – ½ in 2 ½ fine cks

[T OK
[B feed line 1 – 2 peculiar margin cks ½ from Edge

[T Margin ck ¼" from music many 6" pprint
[B 1 ½ from Edge fine –

[T OK
[B 3 feed line cks

[T 2 feed line 3 at different point Margin ck ½ from Edge
[B OK

[T OK
[B 3 feed cks –

452 3/4

Dup of 452
12 1412 Transfers Reg Var
Edges of Transfers filed down flat from Edge 3/4" back
Same Schedule as 452 E

NOTICE

Correct

Seems to have Merit – I think the run titles are Bad

I think feed line Cracks could be clapped by this

1 1/16	5/16	Music

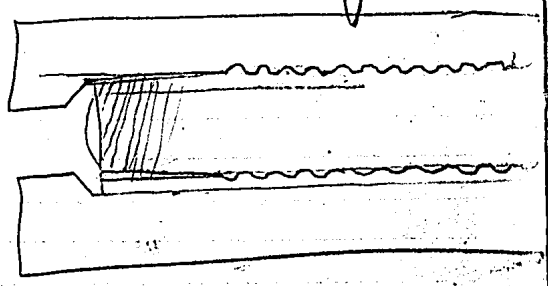
452 3/4 3-1-16.

Note, I note parallell margin cracks are at the Edge between good margin polished and the dull scraped Edge where press is not Enough to polish it

In fact right at the juncture between polish + dull a new line of feed line Cracks shows only a shade larger than music feed line Cks

It is probable that the bowing out of blank plays a part

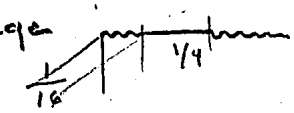
Our moulds should taper in + not out as most of them now do



When Expanding Veneer is held by the Taper + on Contracting is free

We have now 6 music moulds that Taper inwards towards blank 003.

Also two music moulds with feed lines or rather scratches on Edge



The Extra grooves is to hold veneer in position when blank Expands & prevent Cracks, afterwards Edged off -

Transfer

12 1412 blanks

005 thicker

in Center taper down till at 3" from Center it disappears -

C. 1, 2 } Very poor print no cracks 005 thicker on one edge than other

Scraped D 1412

(1, 2 { poor print no cracks

1, 2 { poor print "

1 OK
2 1 feed line crack

1 OK
2 OK

1 OK
2 1 feed line crack –

1 OK
2 OK

1 OK
2 OK

1 OK
2 OK

1 OK
2 feed line

75% OK

A 1 OK 2 OK 100%

B 1 OK 2 OK 100%

452 EA 3–1–16 –

Start with Cold press 100° deg

6 min heating, no contact

1 " at 100 lbs pressure
2 " at 600 "

Cool until 125° Fahr is reached, take off pressure & remove.

A Use 1. Extra feed line at Edge, Scraped 1412 blank

B Use 1 sets moulds padded to taper towards blank
Use 1412 blanks Scraped Edges

C 6 Strait Edged tracked moulds
D use 1412. Scraped blanks
4 Required

A (1 OK 1 OK (1 OK (Crooked Center left side)
(2 OK 2 OK (2 OK

B 1 OK
2 OK 100%

C 1 Clks 1/8" from Edge 1 Reg parallel Clk Center Mark
2 " " " 2 Marquee Clks 3/16 from Edge
1 OK
2 OK 33%

D 1 Crooks 1/8 from edge Corner 1 OK 1 OK
2 " " 2 Edge clks Corner 2 Edge clks Corner

E 1 OK 1 OK 100%
2 OK 2 OK

452 B

Duplicate 452 A.

Scraped 1412 Blanks

A = 2 Records with padded moulds to taper towards blank

B - Tracked edges

C 4 Reg moulds -

D 3 - tracked moulds with 1 label

E 2 2 tracked moulds with 2 labels on a side

Notes =

Whatever is why of thickness of Varnish in Center area of Transfer must be displaced but This hurts Varnish also in displacing a large quantity of Varnish requires pressure & this swells blank Both together tends to strain blank & Varnish make Cracks etc — The blanks should fit the varnish or a 6" piece used

6 mould papers brushed up

1 — OK
2 OK

1 OK
2 OK

1 OK
2 OK

1 OK
2 —— 20 mould, 3 feed lines — may not be padded enough or the blanks scraped too thin.

1 OK
2 OK 22 mould blank not pad enough for blank loss

1 OK
2 — feed lines. No 9 = Cracked in printers in transfer

1 OK
2 OK

1 OK
2 feed line — 17 mould — 75% OK.

1 OK
2 OK

1 OK
2 OK — 24 — Silver streaks Curious only a stain

1 OK
2 OK

1 OK
2 OK

Every one a full black print to the Edge notwithstanding scraped blanks

452EC

Dup 452 EC

12 1412 blanks brushed + transferred, then scraped, Moore #9 Transfer schedule.

12 Padded Moulds —

6 min heat no Contact
1 " 100 lbs press
2 " 600 " print =
Cool to 125° Take vacuum

NOTICE without Care on part of the man 6 minute Histers up, because they either cooled with warm press or Exceeded 6 minutes 5 Min is probably safest. It oxidizes the moulds in spots, blue + yellow and may have to have slight Contact

This is Record
of 454-4 as print

1 OK		1 OK
2 OK		2 OK
1 OK		1 OK
2 OK		2 OK
1 OK	6' minutes too much blister 5 as safer	1 OK — Cooked up bag circle in printing —
2 OK		2 OK
1 OK		1 OK
2 OK		2 OK
1 OK		1 OK
2 OK		2 OK
2 OK	will edge out	
1 — Crack checks 1/4 from music; other sep cks 3/16 from music		OK
2 OK		
1 OK		
2 feed line ck 1/4" long — will place		Discard

9/6 OK

ALL PERFECTLY FILLED TO EDGES
+ Fine Edges
The above is record of
454 4 as printed with Reg transfers
1412 blanks, No 9 moors
Schedule —
+ Not Scraped

454
Prints — 1472 blanks on
454 Reg Var
Not scraped

12 Moulds tapered by padding
A 1 + on B [illegible] —
B 1 with high C [illegible] Mould —

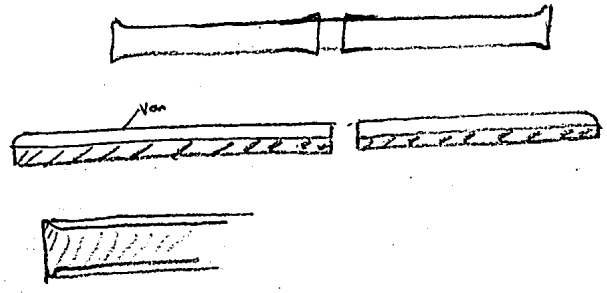
3 men [illegible] 1000 lbs —

NOTICE

We should put 150 Old blank Records
Records with fine
line Cracks in Only
+ set aside for time
test to see if these
Cracks develop

1488 Blank -

Special Blank made in Mould with filet to fit Var. on a flat var plate



1488 Blank — using 1412 Powder

High Contact Mounted

free
1 Slight red not cooked 3" out from hole in spots
2 Cooked and one spot 1 3/4 from Hole

Steel

1 free OK Tinge red end 6" dia
2 OK

Steel

1 free OK
2 free OK
1 OK
2 1 Cooked up Edge of steel disc Ckd..
1 free Cooked Ck "
2 — OK 1" around hole, "whole of 6" red red Center 2" around hole
1st Red at hole 1/2 red out at edge of steel some all over disc
2nd Red in spots whole of steel area
1 free Red at hole 1" red in spots, area of steel
2 free "

1 free Ckd at Edge of steel
2 free red light over area of 6" steel

1 free Red over nearly all 6" steel found
2 free " "

Brass Brass:
1 = Slick Red nearly over entire area 6" brass
2 Stuck hard not much red,

1 free - Red. Spot beyond 6" Cracked
2 free Red bad - 7" dia —

Evidently 387 is a bad Running Varn + dout. flow in transfer

453

12 Transfers 1412 blocks
50 cc 387 Var plates
3 mich Contact 100 lbs
12 " at 2 300 "
8 Steel Disc lapped
3 Brass " not lapped
1 High Contact Mounted

Brass
1 free Red 6" found — at Edge 6" Cracked
2 Slick — Red in the 6" area found

[illegible]

(1 OK
(2 OK

possibly feed line due to taking out at 125 John as blank Cools Later than Veneer

(1 OK
(2 OK.

(1 OK
(2 OK

(1 OK
(2 —— Special mould - feed line ok - slight pp there but Edge is perfectly filled

(1 OK
(2 OK

(1 OK
(2 OK. 2 cks 1/8 in Edge but OK

(1 OK
(2 OK

(1 OK
(2 OK

91.6%

(1 OK
(2 OK

(1 OK
(2 OK

But 10% for full file in places

(1 OK
(2 OK

(1
(2

Edges fine - perfect,
Prints full right up to Edge

455E Series

Transfers not scraped

Print -

12 1412 blanks - Reg Var 45cc
#9 Moore schedule used

Will print with same schedule as as 454E but change heating times. Padded Moulds

Note change to 4 from 6 to stop blistering

4 minutes heat. no contact
1 " 100 lbs pressure
2 " 600 lbs "

NOTE
Reduction from 6" min heat is to stop Cooking

It is OK - Hereafter Make schedule like above its safer + is good -

456

1 free Red 6" cooked in 1" spots
2 free " 6 not cooked

1 free Cooked Cracked very bad
2 free " " "

1 /
2 Stick hard inch of Red " " } opposite - low spot in blank 6" from hole 1. Cracked

1 free Cooked Ckd.
2 free Red - 6"

1 free Cooked
2 free Red 6"

1 free Cooked ckd
2 free " 2 spots } opposite. Blank 5

1 free Cook 6" Ckd
2 free Red —

1 free Cooked - Ckd Bad -
2 free " " "

1 free Cooked bad Ckd
2 free " bad Ckd

1 free Red 8"
2 free Red 6" } principal red spots opposite

1 free Red 6"
2 free 3"

1
2

456E

Transfer 12 1412 brushed Blanks with 45CC 387 Var plates —
3 min at Contact 100 lbs —
12 " at 300 lbs —

free 1 Red 6" no cook
free 2 " 6" " High Center

Note 387 Dont flow well + must have higher pressure
Will transfer another lot at 300 pressure for 15 min See 358E

This is my ~~Chon~~

guessed 387 50cc

1 020

2 014

3 010

4 014

5 014

6 flat.

Should make allowance for Thin Varnish of 4 To 008

Req Var 45cc

1 040

2 015

3 040

4 020

5 020

6 007 020

457E

Transfer 6 blanks 1412

One side only with 45cc Req Var

6 plates 50cc 387 Var

One side only with Moore #9 schedule

3 Minutes Contact 100 lbs -
12 " at 300 lbs -

Moore has not got his gauge to Calliper well do it in the morning

458

High Center
1 = 1 1/2 Red
2 not red

1 1 2 1/2 red
2 ditto opposite - | no cook OK

1/2 Red 6" other side Cooked no

1 OK
2 OK but Crumbled Edge

1 Ckd Edges Crushed blank Very little Red
2 " " "

1 Crushed blank
2 "

1 OK
2 OK

1 2 1/2 red
2 OK

1 Bad Cooked Center
2 6" Red

1 6" Red
2 6 " Cooked

1 Crushed blank —
2

1 2 1/2 Red
2 2 1/2 Red

458E

Dup 456 — 1412 blank
387 - 45 cc Var
using 15 min 300 lbs

All free release —

This schedule on 1412 blank is NO Good —
Crushes blank when too Cold —
Must heat up before pressure
No schedule is best so far

Perfect print means all parts
Except there is in some 10% of a look
to fill in music

1 OK 2 OK	perfect print	
1 OK 2 OK	perfect print	
1 OK 2 OK	perfect print	
1 OK 2 OK	perfect print	Cracks 1/8 from edge OK.
1 OK 2 OK	perfect print	
1 OK 2 OK	perfect print	No 21 X mould
1 OK 2 OK	slight poor print / perfect print	sounds OK - Reprint shows it in mould
1 OK 2 OK	perfect print	
1 OK 2 OK	perfect Print	100%
1 OK 2 OK	perfect Print	
1 OK 2 OK	perfect Print	
1 OK 2 OK	perfect Print	

Note, The fill of the music adjacent to plain margin is not perfect. This is due to later mould & well probably give a smoother surface on chart as the blank

459E

Print —

Dup of 455E Req Var 45cc

is not pressed into the veneer so hard
The fill is 90%

Note 21 mould has a label, but 22 opposite it HAS NO LABEL thus preventing pressure on blank & filling in most cases. In 3 runs - twice it made a poor print

1 Label is Equivalent to 1/2" square 1/10" thick

Absence of label prevented the flow of just that much of the blank

(1 OK
2 OK

good Edges

(1 OK
2 OK

(1 OK
2 OK

~~83~~

(1 OK
2 OK

(1 OK
2 OK

(1 old marque OK
2 seems to be cooked up but chunk it OK

(1 Edge clos within 1/8 of music
2 OK

Discard

(1 OK
2 OK

(1 lots feed line clos - big ones
2 OK

(1 OK
2 OK

75% ok

(1 OK
2 OK

or with 1 Concl

(1 OK
2 OK

83⅓%

159 E

Reprinted

Same Schedule

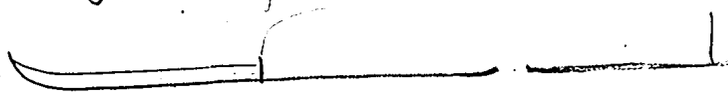
21-22 mould made a poor but OK print also in this —

Note = Either a different Schedule must be found or they must be reprinted on same moulds — or all the moulds must have same taper if high % is to be obtained.

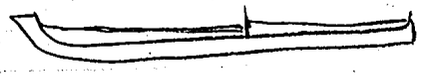
Or Edge again to feed dia but in moulds 4 pieces flat or even higher

Note try flowing plates
that have to threads cut in face
1/100 deep - 150 threads inch
to see if it will stop flow
to Edge & also make a better
transfer if not dont flow Even

Note -
Flow a plate



after flowing set this in Center
until say 10 or 15 min -
then pull it out, make
double draw -



(1 OK
2 Cooked up 3" circle • 17

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK faint print, in Micro 8/10 offill + OK

(1 OK
2 OK

(1 OK
2 = print to poor Discard, in inner music next label

(1 OK
2 = poor print, ⅓ full in Discard inner music next Label

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

83.3%

100% if poor prints not included

460 –

Dup of 455 E

4th Duplication 91.6

Even 4 min heat allows some blanks to Cook up, especially since we have tapered Edges + The lower face is probably the one that Cook

This probably Cant be helped if we lower to 3 minutes liable to have trouble, = might help by drying our weld Varnish more –

Note poor print is next to Label in Van – probably due to the 2@003 label.

Afterwards found pieces not working well –

461

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 OK

Later —
Low steam inlet to platen found and fixed under

(1
2) poor print both sides Opposite 13+14 Discard
Discard

(1 OK
2 = poor print Edge of inner smooth part but OK

(1 OK
2 feed line Crack, Discard can see cooked through Epal

(1 OK
2 OK

(1 OK has faint print near margin but wont sound
2 OK

(1 OK
2 OK

Bottom half
91.6 for Crack

83.3 %

91.5 4 one poor print left out

461-F

Dup of 455 —

But change schedule to

3 minutes heat
1 min at 100 lbs
2 " 600 lbs
Cool to 125° Fahr

This schedule has no Cooked up —
probably 3 min at 600 would fix the poor prints —

(1 OK
2 OK) front PP OK micro

(1 OK
2 OK) front pp micro OK

(1 OK
2 OK) front micro OK
" micro OK

(1
2) poor print discard

(1 OK
2 fed) lineck Discard

(1 OK
2 OK) Dont print out dents in plate Discard

(1 OK
2 OK) Dont print out dents in plate Discard

(1 OK
2 OK) front print OK

(1 OK
2 OK

(1 OK
2 — Cant print out dent

(1 OK
2 OK

(1 OK
2 OK

91.6% for cracks

67%

Press workers bad paper checker

462 E

Dup of 455.

3 minutes heat – no contact
1 " at 100 lbs
Note. 3 " at 600

It is hard to understand this
it should have been better for
poor prints, but it was worse
Possibly mistake at press
or some slip somewhere

Note 455 + Duplicates
has transfers, picked from
those Cooked + too much
Red Centers —

print + OK 90%

(1 OK 90% fill
(2 OK 90 "

(1 OK 90 "
(2 OK 90 "

(1 OK 95 "
(2 OK 100 "

(1 OK 95 "
(2 OK 100 "

(1 OK 95 "
(2 OK 95 "

(1 OK 90 "
(2 OK 90 "

(2 Very poor print Bottom order 2 X 1 no print next margin

(1 OK 15% spots
(2 OK 15% "

(2 Very poor print bare spots

(2 Very poor print

(2 Very poor print

(2 Very poor print — Feed line OK

Bottom plates
Stuck in the press
See 464 100% OK + a Dup

463E

Dup of 455

3 minutes heat - no contact
1 " at 100
2 " at 700

Bottom of press plates must have water in not blown out hence low temperature and poor prints
Must Duplicate this
+ Be sure bottom plates have no water in
Moore just found out press got foul scale got in —

1 OK	100% fill
2 OK	"
1 OK	100% fill
2 OK	"
1 OK	90% fill
2 OK	95% "
1 OK	100% fill
2 OK	100% fill
1 OK	100% fill
2 OK	100% fill
1 OK	100 "
2 OK	100 "

It looks as if
this schedule is OK
if we keep our presses
right
We should now work on
Transfers & varnish plates

1 OK	100% fill
2 OK	100% fill
1 OK	80%
2 OK	80
1 OK	100%
2 OK	100%
1 OK	100%
2 OK	100%
1 OK	100%
2 OK	100%
1 OK	100%
2 OK	100%

13414 - 3rd time

100% OK

464 E NOTE
This is done on another press as my one got choked in steam pipe —

Dup of ~~464~~ 463

3 minutes heat — no Contact
1 " at 100 lbs
2 " at 700 lbs

But this time we will make sure water is not in lower 6 plates of press, hence temperature will be more even

Later found press had piece scale or something in pipe — will try another press —

This shows new Record will detect a bad press also detect a bad Mould 13414 has given a poor print spot 3 times in succession — twice OK

Now
Transfers

(1 free no red
2 free no red. O high Center Mould holder

(1 free no red
2 Hard no red – 1/4" pull out near edge defect in transfer plate – OK. O

(1 free no red OK
2 free no red OK O

(1 free Red 3" out from Center
2 " Red. 6" "

(1 free Cooked bad 6"
2 free shade cooked 6"

(1 free Red irregular with 1/2 inch edge
2 free Red "

(1 free Red 2 spots 1 1/2 from edge been covered
2 ✓ Red 1 " " repaint other parts

(1 OK no red
2 OK no red free O

(1 free Red 6" irregular
2 free Red 6 + within 1" of Edge

(1 free - not red
2 not red } shows black wavy in 2 spots

(1 free no red
2 Red irregular 4 1/2 inches

(1 free Red irregular 5 to 6
2 Red " "

Not promising
Something must be done with Varnish

465E Transfers

Transfer 12 blanks 1412 treated that are high in the Center
Use Reg 45cc Varnish
plates –
3 minutes at Contact 100 lbs
12 " at 300 lbs.

High in Center Moved

(1 free OK
2 OK

(1 free - OK
2 OK

(1 free OK
2 OK very faint red 98% of a

(1 free OK
2 OK } Broken Edge Crushed no red

(1 free OK
2 ~~OK~~ Pull out 3/16 of Edge - 98% for red

(1 free Crushed blank 95% good of red
2 OK for red

(1 free OK
2 OK

(1 free OK
2 OK

(1 free Crushed blank. } 90% good - red
2 no red

(1 free OK
2 OK

(1 Cooked - red
2 Cooked red

(1 Crushed blank OK for red
2 OK for red

No Prints -
Transfer not practicable

466E Transfer

Transfer 12 blanks breaked 1412. that have only been pressed 600 lbs —

Use Reg 45cc Varnish plates

Schedule -

3 Men Contact at 1000 lbs.
12 " at 300 lbs

NOTE Must have blanks made at 1000 lbs as now as the flow of Var softening of blank Crushes it -

fine Edge Cks mostly angle 45° to the Center

(1 no red
(2 no red ½" deep radial cracks about 1/32 apart + spaced along Edge 2 1/4 inches

1 OK no red
2 — radial Cks at Edge blending to minute also Varax
no red

1 OK no red
2 - Heads of radial Edge Crax 50 to the inch

1 no red } OK
2 no red }

1 no red } OK
2 no red }

1 no red Has 3" long at Edge fine Crax 1/8 to 3/8 long
2 no red OK

1 no red } OK
2 no red }

33 1/3

(1 no red } OK
(2 no red }

(1 no red along both Extreme Edges for 3 or 4" Countless 45 deg about cracks
(2 no red

(1 no red - 45° cracks
(2 no red - OK

(1 no red 45° Cracks at Edge
(2 no red OK

(1 No red - Edge cracks 45°
(2 no red OK

Moore. Transfers

By mistake Moore gave transfer man the Print Schedule - old one - + here is the result -

2 Min in Contact
2 " 200 lbs
3 " 600 lbs -

1412 blank, Req Var 45cc

1 stuck
11 free

This makes nice blank but the uneven Varnish is sucked in the blank out of sight. The Var is cracked ½ due to greater pressure -

This shows Moore 9 is more near the proper schedule to bring out defects of Blank + Var + produce a good transfer - The Var is not cured + is probably still somewhat rotten hence Cracks -

(1 free - Regular plate here
2 free - C } both shade Cracked red

(1 — 6" slight red
2 6" very slight red

(1 6" very very faint red
2 6 " " "

(1 no red
2 no red

(1 no red
2 no red

Low edge plates

100% OK

Regulars

(1 Bad Cracked
2 " "

(1 Bad Cracked Red
2 Cracked Cracked

(1 Slight red
2 - other side not filled in with the

(1 6" red
2 6" less red

(1 Cracked - bad
2 Cracked "

(1 6" Red
2 6" Red

(1 Cracked bad
2 Cracked bad

100% Bad

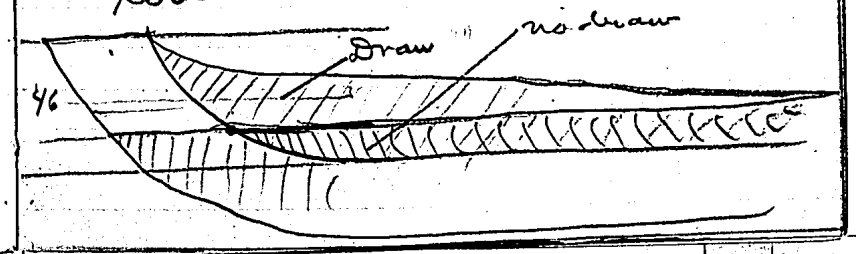
467 E

Transfer 5 1412 blanks broached
Use The low Edge 010 plates
Also 7 Blanks 1412 with
Req 45 cc Vari -

Schedule

3 men at Contract 100 lbs
12 " at 300 lbs

Note great advantage of a low rim. —



Transfers — 8 Blanks 45cc Reg Var

Very Little Red ok	Red moderate	6" Red	Very Little Cooked	Cooked Red	Cooked	OK
IIII	III		III			IIII
Free IIIIIII all — after Edge + Buff + ok for print	Margin Cks 30° dry I			Edges Buff impossible —	CKd 1 Dis	OK IIIII

These are a decided improvement over the big Edged plates — All free release — Very little Var squirted over Edge several times less than with the other plates, no yellow — The red + cooked is 50% less than Regular a little more improvement will do the big — Think blank should be 1/32 smaller on a side

4 with 50cc Reg instead of 45 —

Very slight Red	Modred	6" Red	Very Little Cooked	Cooked	Cooked Red	OK	Cooked Ckd
II		I	I		IIII		I
after Edge + Buff							
all free release							Ckd at hole II

Being 5cc thicker the Centers are not so good, as 300 lbs does not force Var down at Edges + perhaps also the thicker the Var the more it creeps to Edges —

468E

Transfer 12 1412 brushed Blanks using 010 Var plates req Var 45cc

3 min contact 100 lbs
12 " at 300 lbs

468EA Press at 100° Fahr
Print them all with Padded moulds

3 minutes heat, no contact
1 " Contact 100 lbs
2 " 700 lbs —

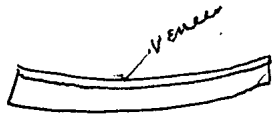
Cool to 125° Fahr

50cc —
(1 OK slight crack ok
2 OK " red ok
(1 very poor print Edge
2 both sides
(1 OK
2 OK
(1 Cracked in red near Label
2 OK " wear in transfer

Prints —
45 (1 feed line cks
2 feed line cks
(1 OK
2 OK
(1 OK
2 feed line cks
(1 OK
2 feed line cks
(1 feed line
2 feed line
(1 poor print
2 poor print
(1 OK
2 feed line cks
(1 poor print
2 poor print.

OK II
Dis IIIIII —

#		
1	000 —	
2	008	dished
3	000	
4	015	"
5	027	"
6	015	"
7	027	"
8	010	"
9	023	"
10	034	"
11	022	"
12	014	"



set aside in Chemical room
top of Book Case —
3—6—16 —

469E

474 Schedule —

Transfer # ~~9 schedule~~

12 1412 blanks - on weld varnished
on one side — put transfers
on varnished side —
010 plates

Req Var without Sandrac
for Dish test

Ordered Enough Var for 70 plates

All free release —
which shows at least that without
Sandrac & low run plates
Sandrac is not necessary
to get free release —

We are transfg 12 more
Req new schedule 180° Fahr at
Contact See 475 EX further along

Faces

Mch 4 on hand 250 Reg high edge 387 var platers } 45cc
" " 387 low edge 010 387 "

Spotted Red	Irregular Red	6" red	Cracked Little	Bad Crack	Cracked Old	Crumbled Edge	Cracked 2" 6"	OK	pull out	
III		II			II		IIII I	IIII II	I	1st Inspection
										(Edge) Inspection

Stuck IIII IIII – [illegible]
nothing comes over the Edge to amount to anything
OK
Discard IIII IIII Bad way to
Record Can't tell anything
about it Keep to old plan
These Inspectors are very
poor.

NOTICE 387 Var must have
a softener. The softener must
dissolve Resin, & be not too hard at
75° Fahr non Volatile & with very little
shrinkage –

470E

Transfer 12 1412 brushed blanks
with 387 45cc – 010 plates
3 min Contact at 100 lbs,
12 " at 300 lbs.

Inspection after Buffing & Edging

1 – Ckd – lifts within 6"	1 1/32 pull out
2 " " "	2 OK
1 Ckd lift "	1 OK
2 " " "	2 OK
1 OK	1 OK
2 OK	2 OK
1 OK	
2 OK	
1 OK	
2 Cracked due to stuck at hole –	
1 OK Ckd 1/2" at hole	
2 OK OK	
1 OK	
2 OK	
1 OK	
2 OK	
1 OK	
2 OK	

Padded Mould

Printed this
When Thermometer on platten showed
160 we put them at Control 100 lbs →
= It should have been at least
200 of not 225 –

(1 75% point one spot
2 90% " " opposite 1 dent indent point out

(1 feed line ck
2 feed line ck) Dis –

(1 85% full point OK) OK
2 OK

(1 1/8-bead chewed up edge fine parallel cks OK
2 feed line cks – Very poor point spot both sides

(1 Cks Edges 3/16 inch in – Dis 75% – off free Dis) Dis
2 OK –

(1 feed line cks poor fill) Dis
2 feed line cks "

(1 Ckd Marqui 3/16 from music – feed line cks) Dis
2 feed line cks – + a blister –

(1 30° angle Cks Marqui Very poor fill) Dis
2 feed line cks "

(1 feed line ck – Very poor fill) Dis
2 Cks marqui 1/8 in –

(1 Very poor fill – Red
2 Spot not pounded out fracks 1/8 in marqui) Dis

(1 2 feed line cks Very poor point) Dis
2 " " "

(1 feed line cks 2 Red
2 " " Red) Dis

4371 E

P

Transfer 12 1412 Crushed
blanks –
387 Var low edge 010 platen
45cc
Schedule 8 Min at 150 lbs
12 " 300 lbs

Transfer

(1 free 6" red OK
2 free 6" red OK

(1 free Cooked bad Ckd
2 free " " ") Dis

(1 free Cooked Ckd
2 / Cooked Ckd) Dis

(1 free " " "
2 free " " ") Dis

(1 free Cooked – OK
2 free Cooked OK

(1 free OK
2 free OK

(1 free Cooked
2 free Cooked small pull out) Dis

(1 free small red spots OK
2 free " " OK

(1 free 6" almost Cooked OK
2 free 6" " " OK

(1 free Cooked OK
2 free Cooked OK

(1 Stick pull out in black 1/4) Dis
2 Stick – OK

Will print

(1 free – Red spot
2 free Red Spot } opp OK

OK 7
Dis 5

3-5-16

Our failure to duplicate with same % OK is that the rise in temperature of the press varies too much, We cannot use time as an indication of Temp -
Must use a Thermometer + when it has reached to specified temp the 100 lbs pressure is put on

+ Even this is faulty for if we reach the specified temp too quickly The differences of temperature between bottom + top is too wide, hence we shall have to attain safety by throttling the steam + give it more time to reach the proper temp If 4 minutes will do it at full steam it will be better to take 6 or 7 min or even 8 So there will be only few degrees difference between top + bottom Otherwise, Blanks will receive veneers when differently Expanded + it will cause one veneer to flow more than the other bringing in Cracks, checking etc

30" pressure of steam	273° Fahr
40 "	286 "
45	292 "
50	297
55	302
100	337
110	344
120	349

Preliminary Test to prove concordance of Thermometers gives following for rise of temp with Thermo (3) mylar on Center of platten, paper over Steam. 120 lbs - 15 sec Valve open 40 lbs in platten - 1 min 75 lbs - 1½ 80

Start	88
1 min	140
2 "	210
3 "	260
4 6 sec	300

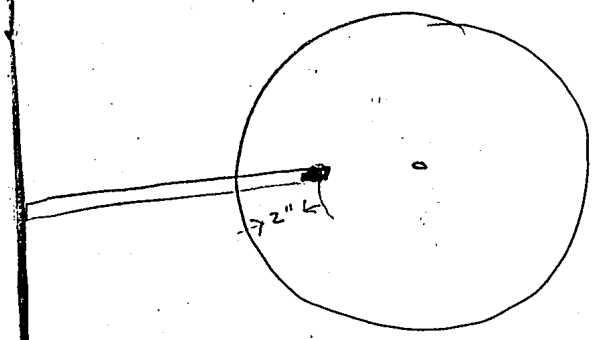
Steam Pressures	
15 sec	40 lbs steam
1 min	75
1½ min	80
2 min	100

Can keep it at 100 by Valve, We permit at 100 lbs

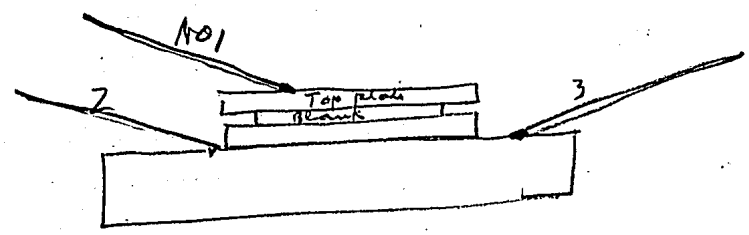
Top #	plate	Platform 2+3	Top	plate		Top	plate
15	80	80	15	134	289	15	186
30	80	81	30	136	290	30	186
45	82	85	45	138	291	45	188
ONE	84	95	NINE	139	292	Seventeen	189
15	85	105	15	140	293	15	190
30	86	125	30	142	295	30	191
45	87	130	45	144	296	45	192
TWO	88	143	TEN	146	297	18	194
15	89	157	15	148	298	15	196
30	90	170	30	150	299	30	198
45	92	180	45	151	299	45	198
THREE	96	193	ELEVEN	152	300	19	199
15	98	205	15	154	301	15	200
30	100	212	30	156	302	30	202
45	104	222	45	158	302	45	204
FOUR	110	228	TWELVE	160	302	20	206
15	111	234	15	162	302	15	207
30	112	241	30	164	302	30	208
45	114	246	45	166	303	45	208
FIVE	115	252	THIRTEEN	168	304	21	210
15	116	256	15	169	304	15	210
30	118	260	30	170	305	30	211
45	119	265	45	172	306	45	212
SIX	120	268	Fourteen	174	306		
15	121	270	15	176	306		
30	122	273	30	178	306		
45	124	276	45	178	306		
SEVEN	126	279	Fifteen	179	307		
15	128	281	15	179	308		
30	129	284	30	180	309		
45	130	286	45	182	309		
EIGHTH	132	288	Sixteen	184	310		

Experiment No 2

Steam put right on Thermometer #1



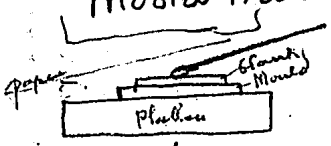
on Top plate,



The temperatures of 2+3 are with 3 to 5 deg

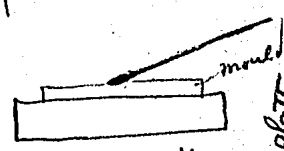
This Experiment shows we cannot work without Contact.

Moores Previous Expm No 1



Steam 101 lbs
Steam off 100° fahr

1 minute	106
2 "	112
3 "	128
4 "	148
5 "	162
6 "	195
7 "	217
8	238
9	252
10	264
11	274
12	281



Steam 107 lbs
Steam off - 100°

		on platten	Steam 100 Expmt No 2	Dif
1 min		110	95	-15
2 "		140	143	+3
3 "		175	193	18
4 "		210	228	18
5 "		236	252	16
6 "		258	268	10
7 "		273	279	6
8 "		285	288	3
9 "		295	292	3
10 "		302		
11 "		309		
12 "		314		
13 "		318		
14 "		322		
15 "		324		
16 "		327		
17 "		327.5		
18 "		330		

Contact 75° fahr difference between platten & 2 faces of blank approximately

3 min with 30 lbs steam then 100 lbs

		No 2			
Start			15	296	15
	15	80	30	298	30
	30	84	45	302	45
	45	92	8	304	15
	1	102	15	308	15
	15	114	30	310	30
	30	126	45	312	45
	45	138	9	314	16
	2	148	15	316	15
	15	158	30	318	30
	30	168	45	319	45
	45	176	10	320	17
	3	184			
	15	190	15	321	15
	30	199	30	322	30
	45	206	45	324	45
	4	216	11	325	18
	15	222	15	325	15
	30	232	30	325	30
	45	241	45	326	45
	5	248	12	326	19
	15	256	15	325	15
	30	262	30	325	30
	45	268	45		45
	6	272	13		20
	15	278	15		15
	30	282	30		30
	45	288	45		45
	7	292	14		21

The blank was balanced up to the Tile from 9000 in blank - pressure blew out 2 places 1 side 1 on the other frequently short Cracks - The might be a little looser - 9 notice the tile are only 1/2 impressed

Experiment 1 shows that 200 deg on platten it is nearly safe if not safe to print —

Platten weigh 125 lbs Each
Moulds " 16 lbs Each Top & Bottom
Total 141 lbs —

1551 lbs total 19.6 lbs per square inch of blank

Tests to determine when blank is soft enough to be safely impressed without harm. The only weight is 11 platens & 11 moulds — The blank is on the bottom platten. The lamp is measured on the inlet side of steam — on the face of the platten.

No 1

200° Fahr — Required 2 Min 53 Second
The record showed softening Tits are nearly if not wholly impressed — One side shows nearly all over an imprint of tops of the weeves

Note — On Cooling the 1st min it was (210 214 & 194 — 2 Min 168 —
no blister

No 2

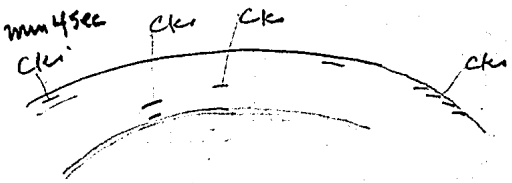
Platten at 220 — required 3 min 17 sec
in cooling went up 10 deg higher
This shows considerable more pressure think that it is soft enough — seems to have a blister — in 2 places but they are faint and probably tits were sunk in considerable when they raised —

No 4 Experiment
80 start

82
89
99
111
123
136
148
163
178
192
206
218
229
240
249
258
260

4 min 4 sec

60% of a fill – Very little pressure well fill it
Best fill of all. but some Edge Cracks, some within 1/8 of music
This is Bad.



Some on one side some on the other —

8° higher on cooling

Short Cracks in every place Except Edge parallel cks are probably due to Cooking up + cracked by gas pressure the raise disappears on pouring but the Cracks remain

Moores readings on Experiment.

No 1
80° start

82
88
98
109
120
134
146
158
172
184
196
200

2 min 53 sec

No 2
80 start

88
98
108
117
128
139
152
164
176
188
199
210
220

3 min 15 sec

No 3.
80 start

88
98
109
121
134
148
162
177
190
204
214
228
238
240

3 min 25 sec

on cooling went up 250,

No 3 Experiments does not print much better than No 2 but it raises up very bad showing it is too high temp to be safe as pins are too far away

Duplicate of No 4 Experiment

80 Start

87
99
113
128
143
158
174
188
204
217
230
242
252
260

3 mm 30 sec

fell about same but is cooked up + it appears as if the better fell on No 4 is due to pressing up the low parts again Mould drawing fell by gas pressure

Edge Cracks

All these tests on temp printing + temp curves made on Sunday no other processes Running

Padded Moulds used

4

Top -

1 OK 2 OK	bad blank — not full enough to be OK	
1 OK 2 OK	"	95% filled
1 OK 2 OK		95% filled
1 OK 2 OK		filled except faint dent
1 OK 2 OK		95% filled
1 OK 2 OK		full
1 OK 2 OK		full -
1 OK 2 OK		1/8 in Marquicks Edge out
1 OK 2 OK		full
1 OK 2 OK		95% filled
1 OK 2 OK		filled
1 OK 2 — feedline 12 moved		poor print in spot

91.6%

83.3 of Top cant be reprinted.

472 E Req high ~~Edge~~ platen

12 prints from 1412 brushed blanks, Req 45 cc Req Var picked out. no red or Cooked Curls —

100 lbs steam

Print Contact till Thermometer reaches 200 degrees fahr then 1 min at 100 lbs 2 min at 700 lbs

Padded Moulds used

Steam dropped so cannot get 100 lbs — got to 284 ° on platten,

When put it at 100 lbs + 200 deg it was 3 min + 4 sec to get to 200° fahr

This is OK —

Make Several Dup

473 E

Baking 100 1412 blank
brushed 5 hours not
to Exceed 125° to
reduce Cooking & gas
pressure but not
to harden weld Var

Edges fine - no squint at all - no yellow -

(1 free OK
(2 free OK

(1 free OK slight tinge red - 3" around hole
(2 free OK

(1 free OK
(2 free OK

(1 free OK
(2 free OK

(1 free OK
(2 free OK slight tinge 3" around hole

(1 free OK
(2 free OK

(1 free OK
(2 free OK

(1 free OK
(2 free OK slight signs cook 2" around hole

May these not be OK because they are Cooked up or they will not print - which they didn't

(1 free OK
(2 free OK very slight red 1" around hole

(1 free OK
(2 free OK " " 100%

(1 free OK
(2 free OK

(1 free OK
(2 free OK very slight red 4" around hole.

The free release is due to low rim plates, possibly some to plates being quite Cold —

474 E

472 Printed OK
This Dup All Bad — only difference vs. low rim plates + + slightly dif schedule.

12 Transfers 1412 Brushed Blanks
use low rim 010 plates Reg Var 45cc
Bring To Contact Put on Steam starting at 80° — When thermometer reaches 200° Fahr Put pressure To 100 lbs for 1 minute then 300 for 12 minutes Cool down to 80 —

Started 80°
It took 2 min + 33 seconds to reach 200° Fahr
Steam on Main line 120 lbs. on press 105
at End of 12 min it reached 328° Fahr —
Cooled down very cold.

Print
(1 OK
(2 OK

Edge parallel to in

(1 (2 poor print Edge music

(1 (2 Very poor print both sides 1/8 crack parallel 3/16 in at pp

(1 (2 Very poor print feed line ckr opposite pp —

(1 (2 poor print feed line ckr opposite pp

(1 (2 poor print

(1 (2 poor print

(1 (2 very poor print

(1 (2 poor print - marque ckr at pp

(1 (2 hardly any print at all -

(1 (2 See next page

(1 (2 reprinted 4 min at 700 —

474 = Reprinted — same schedule but 4 min at 700, i.e. Reached 200 in 2 min 5 sec at End 1 min 248 at End of 4 min 301° Fahr

(1 OK
2 OK margin parallel 1/16 in — failed

(1 OK
2 OK — failed

(1 1 single feed line OK
2 OK Edge parallel 1/16 in OK — failed) Discard

(1 OK
2 margin parallel 1/16 one short one 1/8 in OK, failed

(1 OK
2 OK — 95% of failed

(1 OK
2 OK 1 margin ck 1/16 in — failed

(1 OK
2 OK 96 — failed

(1 OK
2 OK — failed

(1 OK margin 1/16 one 1/8 - 2 edge out
2 OK — failed

(1 OK
2 OK — failed

(1 OK
2 OK margin parallel several makes less than 1/16 in — failed

(1 OK
2 OK — failed

Evidently flat plates on the new schedule requires change in print schedule from 2 min at 700 to 6 or less minutes —

475 E

~~12 Transfers 1412 brushed blanks low rim 45 cc Reg Var. Bring to Contact. When temperature reaches 195° Fahr. put 300 lbs pressure on gradually (not suddenly) & hold for 12 minutes —~~

474 E Didn't print well at at 472 E schedule like the 472 did —

This is a Reprint of 474 — but 4 minutes at 700 lbs instead of 2 minutes

Transfers of 475-

(1 Looks as if the Var on plate Ckd before use — black
(2 OK

(1 OK
(2 OK black

(1 OK
(2 OK black

(1 Ckd Var plate } black
(2 OK

(1 OK
(2 OK black

(1 OK
(2 OK black

(1 OK
(2 OK black

(1 OK
(2 OK black

(1 OK
(2 OK black

(1 Ckd Var plate } black
(2 OK

(1 Ckd Var P } black
(2 OK

(1 OK
(2 OK black

100% of these had been no cracked varnish plates —

possibly this schedule cracked the varnish on plates but it dont appear that way

NOTICE

All free release

It would appear from this that the lower temp when Var got tough + had not reached rotten state that it flowed, got in Contact all over + then when high heat came it didnt have to flow in rotten state —

475 E

Padded Moulds

12 Transfers 1412 blank — low rim Req 45 cc Var

Bring to Contact, when temperature reaches 180° Fahr put pressure on at 100 lbs for 1 minute Then put pressure to 300 + hold for 12 minutes — Cool to 80

Prints — 474 Point schedule — 4 mm Pad

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK
(2 OK

parallel Edge ck 1/16

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK
(2 OK

filled (1 OK Edge ck 1/16 in
(2 OK " "

filled (1 OK Edge ck 1/16
(2 OK

filled (1 OK
(2 OK

100%

The 4 Ckd Var plates were found bad only 2 until warmed

476E

12 Transfers 1412 blank
brushed. Use low rim 45cc
Reg Var

Bring to Contact, when
temperature reaches
160 degrees - put on 100 lbs
pressure for 1 min —
then put on 300 lbs for
12 minutes — Cool

NEW SCHEDULE

474EB Transfer

Low Rim plates 1412 brushed blank Req Var 45cc

Bring to Contact = Put on steam until Temperature of platten reaches 200° Fahr Then put pressure on to 100 lbs for 1 min Then increase pressure to 300 lbs for 12 minutes

(1 ohaded OK
2 OK

(1 OK 4½" read-
2 OK " "

Think we need baked blanks —

(1 OK very slight read.
2 OK

(1 Cooked + Cracked at hole Radial Cks near Edge bad DIS
2 Cooked " " no Edge radial

(1 OK
2 OK - slight read near hole

(1 OK
2 OK

(1 Little Cooked 6"
2 Red 6"

(1 OK
2 OK

91.6

(1 OK
2 OK Red 4½" in.

(1 OK
2 OK Red 4" unequal

(1 OK
2 OK

(1 OK
2 OK

Not near as good as original 474E can't be blanks are newer

NEW SCHEDULE

474EB Prints

Put in contact — put on steam wait till platten reaches 200° Fahr, The put pressure to 100 lbs for 1 minute, The increase pressure to 700 lbs for 4 minutes, Cool, Take out 125° Fahr

(1 2 feed line cks - parallel Edge cks 1/16 in filled DIS
2 parallel Edge cks 1/16 in

(1 } poor print 3 Long 3/4 - slant of music + feed line cks in it - DIS
2 }

(1 OK } filled
2 OK }

(1 OK } filled
2 OK }

(1 OK } filled
2 OK }

83.3 as far as print is Concerned

(1 OK } filled
2 OK }

(1 OK } filled
2 OK }

75%

(1 OK not filled but OK
2 OK

× (1 OK filled
2 OK

(1 OK } filled
2 OK }

(1 OK not filled but OK
2 OK

(1 } Radial Cks - DIS This was in transfer
2 }

Baked Signature 474E

TRANSFER new schedule + plates - low run

474 E C - Dup -

(1 OK
2 — angle crack Edge inward 3/8) Discard noted

(1 OK
2 Cracked at hole 1/2 long) Dis

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 2 1/2 cks at hole) Discard.

(1 OK
2 2 1/4" cks at hole

(1 OK
2 1 1/4 ck at hole -

(1 OK
2 OK

(1 OK
2 OK

(1 OK
2 angle Cracks Edge rimmy further on - Left angle 45 1/2" Long another 3"

(1 OK
2 OK

(1 OK
2 OK

50%

All free
Started 90° Fahr
Reached 200° in 2 min 30 sec 328° at End 12 min

Note 4 Cracks at holes in Transfer Comparison These Escaped the notice of Inspection on the Prints, but found when Looked for

474 E C Prints 4 min Reqpacheduls -

(1 OK
2 angle crack - DIS it was in Transfer filled

(1 OK filled
2 OK

(1 OK filled
2 OK

(1 OK filled.
2 OK

(1 OK filled
2 OK

(1 OK filled
2 OK

91.6 % as far as Printing is Concerned

(1 OK filled
2 OK

(1 OK filled
2 OK

(1 OK
2 Angle Cracks at Edge filled DIS it was in Transfer filled

(1 OK filled
2 OK

(1 OK
2 feed knack DIS — Only Discard due to print

(1 OK filled
2 OK

All are filled showing 4 min at 700 is ample

[illegible]

Transfers D 474E Baked Blanks 473E
Low plates -

(1 OK 2 OK) Black
(1 OK 2 OK) Black
(1 OK 2 OK) Red
(1 Cooked Centers Cracked on both sides DIS
(1 OK — Cracked at Hole) Red DIS -
(1 OK 2 OK - Cooked 3" out may be OK slightly Cooked) Red DIS
(1 OK 2 OK) Black
(1 OK 2 OK) Red
(1 OK 2 OK) Black
(1 OK 2 - cracked at hole) Red DIS
(1 OK 2 OK) Black
(1 OK 2 — Cracked in hole) Red DIS

60%

No Edge Cracks

all free

Reached 200 in 2 min 40 sec 326 at 12 mins

The Edges of these transfers are very perfect possibly due to less gas

Centers
Black
Black
Burned 3"
DIS
Red
Red
Red
Red
Black
Red
Red
Red
Black
Red
Red
Black

D 474 Prints
New schedule

(1 OK 2 OK filled)
(1 OK 2 OK filled)
(1 OK 2 OK Light print
(1 OK 2 OK filled)
(1 OK 2 OK filled)
(1 OK 2 OK Edge parallel cks 1/32 in
(1 OK 2 OK Light print, scarcely noticeable
(1 OK 2 OK filled)
(1 OK 2 OK filled)
(1 poor print DIS - Edges not flowed
(1 OK 2 OK filled)
(1 OK 2 OK margin parallel cks 1/16 in -

96.6 -
or 100% as far as print is concerned

474E E Poor lot. Var plates
Culls=Tail end big lot

New schedule—

(1 free Cooked Cracked rzd 6" DIS
(2 Slick Cooked " "

(1 free OK
(2 free OK. slight red

(1 free OK
(2 free OK Black

(1 free OK
(2 free OK Black

(1 free OK
(2 free OK Black 83.3%

(1 free OK
(2 free OK Cooked 7"

(1 free Cooked OK
(2 free Cooked Cracked from hole

(1 free Cooked
(2 free Cooked } may be OK

(1 free OK
(2 free OK Black

(1 free OK rzd
(2 free OK cooked little.

(1 free OK
(2 free OK Red— no crat

(1 free
(2 free NG all rzd Ckd & pulled out

End 12 min 322°

We have just found several thousands belly & variation in the transfer holders which is very very bad as we are working very close (12) within .002 to .003 + these variation are many times that —

These holders must be ground within .001 & be parallel —

See Bachman

Get 2 sets for our Experiments

We put blanks only 1412 not varnished — between reg high transfer plates — no var on plates. The blanks were previously Calipered 4 points opposite — It is the plate that produces the effects at the Edge

A few of the Edges are slightly rounded most are flat. Most have .010 to .020 of Edge just pushed out

in places these are nicked & fallen off

We thought it was the varnish when we first saw it on transfer

Caliper shows about .005 + less shrunk at 4 Caliper points at Edge

+ that Centers .009 is practical average about .006 is average overall —

The great swelling of blank with veneer on must be due to gas — not being able to get there veneer — it probably takes place when pressure is taken off — over

NOTICE

We may have to include in our schedule holding the transfer + possibly the Print under pressure for 5 minutes after its cold to allow the gas to fall in pressure

As these blanks were not Varnished with Weld Var - The gas pressure with Brushed blanks would be very much greater.

Also from 475 E It seems the best results both print + transfer is when both draw their initial formation at low temperatures platen 180 on transfer 200 on print -

477 E

Hoffman

Make up Enough Reg Var to flow 100 Var plates 45 cc —

Leave out Sandrac

flow on low Edge plates.

Reg Oven Schedule

Cont found in print after going over twice with great care

filled (1 Herring bone Crack Radial 3/4" Long
2 OK

(1 OK
2 OK

(1 OK
2 OK

(1/2 Long Crack

(1/2 Long Crack newly welded had search long to find in print -

(1 OK
2 OK

50%

(1 Crack at hole 1/2
2 " "

(1 pull up
2 ~~OK~~

3/4 Dia 2 ft thick not found in prints ?

(1 OK
2 2 1/4 cracks at hole

NOTICE

(1 OK
2 OK

Sandrac melting + expanding may correct the great contraction of the Condensite next to Var plate by being condensed by the higher heat + may thus be a good instead of Bad Thing

(1 OK
2 OK

(1 OK
2 OK

The long Cracks looks as if Var Cracked on plate, as plates are 3 days old or else the schedule 180 makes them, or mould press too cold

475 EX - Dup of 475 E

Except NO Sandrac in the Req Varnish

" 475 E Schedule

180° Fahr - instead of 200° Fahr

Out of 27 Var plates 3 were cracked + lifted when we started to use them - 3 days old -

4 of the plates stuck

This shows powerful contraction due to Sandrac + we showed of possible

Discard it

Print 474 Sch 4 mg

filled (1 OK to marginal chs
2 OK

filled (1 OK
2 OK

filled (1 OK to marginal cracks
2 OK

filled (1 OK
2 OK

filled (1 OK
2 OK

filled (1 OK
2 OK

100% as far as prints are concerned

(1 OK filled
2 OK

(1 OK filled
2 OK

(1 OK filled but long crk in transfer + 1/16 Edge chs
2 OK

(1 OK filled
2 OK

(1 OK filled
2 OK

(1 OK filled
2 OK

3 defects in Transfer were missed in this inspection

Transfers 478

1 = (1 OK, 2 OK) black

2 (1 OK, 2 OK) Red worm 1½ from hole radial - black

3 (1 OK, 2 OK) slight red

4 (1 OK, 2 OK) slight red

5 (1 OK, 2 OK) black - probably had an unalloyed radial crack

100% if Var on plate had not ckd -

6 (1 OK, 2 OK) black

8 (1 OK, 2 OK) black

7 (1 OK, 2) Var mch on plates Cracked up many directions

10 (1 OK, 2 OK) Red Cracked a little

9 (1 OK, 2 OK) black

91.6

12 (1 OK, 2 OK) Red Red

11 (1 OK, 2 OK) black

All free release -

Think we are using moulds too cold as transfers shows as if Var on plates Cracked pulling in press - or in cold moulds -

As all have perfect free release we can use warm moulds + presses

It may be all our presses should not full before 100 Tons Var plates + all at least transfer as after cracking it probably OK -

3-7-16

478 Req Var 45cc

12 - Transfers Req Var 45cc
1412 brushed Chromex

Bring to Contact.
When temp reaches 180°
put pressure on at 100 lbs -
for 1 minute Then to 300 lbs
for 12 minutes - Cool
Take out at about [illegible]

11 (1 OK, 2 OK) filled

6 (1 OK, 2 OK) filled

7 (1 OK, 2 OK) filled - Except the Var. cks in plate - nearly closed up

4 (1 OK, 2 OK) filled

100%

3 (1 OK, 2 OK) filled

2 (1 OK, 2 OK) filled Red worm shows but OK did not Crack

8 (1 OK, 2 OK) filled

5 (1 OK, 2 OK) ~~There is a welded~~ filled Crack which was probably a transfer + not noticed.

10 (1 OK, 2 OK) 1/16 in Margin cks filled

1 = (1 OK, 2 OK) filled

9 (1 OK, 2 OK) filled 1/16 margin ck.

(1 OK, 2 OK) filled

479 - Transfer -

1 (1 OK, 2 OK) radish

2 (1 OK, 2 OK) Cooked rather bad both sides worms + matte

3 (1 OK, 2 OK) Redish

4 (1 OK, 2 OK) Black

5 (1 OK, 2 OK) Redish

6 (1 OK, 2 OK) Cooked both sides

7 (1 OK, 2 OK) slight redish

8 (1 OK Redish, 2 OK Cooked) ~~worms~~

9 (1 OK, 2 OK) black

10 (1 OK black, 2 OK redish)

11 (1 OK Red, 2 OK black matte Cooked worms)

12 (1 OK, 2 OK) Black

All free release -

100% of Cooked dont interfere

75% of Cooked Counted against

3-7-16

479-B Transfer - 45cc Req Var

Dup of 479B -

Except platters warm - so as not to Crack Var on plates - Maulds were also warm = not cooled down so low, as we have been doing -

Print.

1 (1 OK, 2 OK filled)

2 (1 - Cracked in Cooked part, 2 OK - shows red spots) DIS filled

3 (1 OK 1/16, 2 OK 1/16 Marquicks filled)

4 (1 OK, 2 OK filled)

5 (1 OK, 2 OK filled)

6 (1 OK, 2 OK filled)

7 (1 OK, 2 OK filled)

8 (1 OK, 2 OK Red -)

9 (1 OK 1/16 marquicks, 2 OK 1/16 " " filled)

10 (1 OK 1/16 " " filled, 2 OK 1/16)

11 (1 OK, 2 OK filled)

12 (1 OK, 2 OK filled)

100% of Cooked not Counted against

Transfer 479C

Since getting new lot of rubber Var Transfers are cooking more & redder

1 (1 OK Black
2 OK slight red

2 (1 OK
2 OK Black

3 (1 OK
2 OK Black

4 (1 OK red
2 parallel cracks in music

5 (1 ~~OK~~ Cooked red — DISCARD
2 OK Red

6 (1 OK
2 OK Black

83.3

7 (1 OK
2 OK Black

8 (1 OK
2 OK Black

9 (1 Crack ½ long in hole Red DISCARD
2 OK Red

10 (1 OK
2 OK Black

11 (1 OK
2 OK Cooked

12 (1 OK
2 OK Black

3-7-16

479-C Dup 478 180°

45cc Raq Var

Warmer platters, moulds + not chilled down so much —

Print

1 (1 OK
2 OK filled

2 (1 OK filled
2 OK

3 (1 OK
2 OK filled

4 (1 OK filled — it shows the parallel Cks in music
2 OK

5 (1 OK Red
2 feed line Ck — Cooked red — DISCARD filled

6 (1 OK
2 OK filled

7 (1 OK filled
2 OK

8 (1 OK filled
2 OK

83.3.

9 (1 OK filled
2 OK

10 (1 OK
2 OK filled

11 (1 OK
2 feed line Cracks — This was Cooked DISCARD

12 (1 OK
2 OK Light print

Transfers

1 (1 OK, 2 OK) slight red

2 (1 OK, 2 OK) Black +

plate has an injury

3 (1 OK, 2 OK) Black

9 (1 OK, 2 ——5 ange cracks ½" long standing 4" in angle 7/8 ⊞ DISCARD ✓ There is a bad pigly mark at this point

5 (1 OK, 2 OK) Black

6 (1 OK, 2 OK) Black

7 (1 OK, 2 OK) Black 2" from hole on marked area is 3 mole hills resembling cracks - nearly parallel

8 (1 OK, 2 OK) Black

4 (1 OK, 2 OK) Black

91.6

10 (1 OK, 2 OK) Black

11 (1 OK, 2 OK) Black

12 (1 OK, 2 OK) Black

NOTE Even plates + Even plate holders will stop Cooked Transfers and give nearly perfect transfers on 1412 with this schedule, with req Var All free release.

3-7-16

478 ED - Req Var 45c Padded Moulds for Printing -

Mould holers straight - by Luhr - 4 are within 001 the others are best we can find — Var plates are Even + have no step down 4" from hole —

Printo

2 (1 OK, 2 OK ½ marquick filled)

1 (1 OK, 2 OK filled)

3 (1 OK, 2 OK filled)

4 (1 OK, 2 OK filled - ½ marquick

5 (1 OK, 2 OK filled

6 (1 OK, 2 OK filled

100%

as far as print is Concerned

7 (1, 2

8 (1 OK, 2 OK filled)

9 (1 OK, 2 OK filled) — But the transfer angle cks are in not closed

10 (1 OK, 2 OK filled)

11 (1 OK, 2 OK filled) 1/16 in marquicks

12 (1 OK, 2 OK filled)

2nd Proof 3-19-16 - #1 feed line crack

Transfer 478 E (E)

1 (1 OK, 2 OK) some red.

6 (1 — 2 ½ crack from hole, 2 OK) Black

DISCARD ? practically printed out

3 (1 OK, 2 OK) slight red

4 (1 OK, 2 OK) Black

5 (1 OK, 2 OK) Black

2 (1 OK, 2 OK) Black

7 (1 OK, 2 OK) Black

91.6

8 (1 OK, 2 OK) Black

9 (1 OK, 2 OK) Black

10 (1 OK, 2 OK) Black

11 (1 OK, 2 OK) Black.

12 (1 OK, 2 OK) Red 6" note. shows in print.

All free release

3-7-16

45cc Reg Var

478 E (E) 2nd Round of good Transfers & moulded holders

Dups of 478 E II Inspected 3-7-16

1 (1 OK, 2 OK) filled 1/16 manqueks

2 (1 OK, 2 OK) filled

100%

3 (1 OK, 2 OK) filled

4 (1 OK, 2 OK) filled 1/32 manqueks

5 (1 OK, 2 OK) filled

6 (1 OK, 2 OK) filled The Transfer Cracks at hole, detail closed difficult to

7 (1 OK, 2 OK) filled 1/32 manqueks

8 (1 OK, 2 OK) filled " " "

9 (1 OK, 2 OK) filled

10 (1 OK, 2 OK) filled

11 (1 OK, 2 OK) filled 1/16 manqueks - . blank itself shows Crack 1/16 in for several weeks

12 (1 OK, 2 OK) filled Can see red in latex cover

2nd Inspection 3-19-16 - #1 feed knock #2 chipped out on edge (Ks developed from chip out due to edging machine -

478 (F) Uneven Varnish 1st round

1 (1 OK / 2 — 2 ¼" cracks from hole DISCARD Black
2 (1 OK / 2 OK Black - has long radial line not cracked
3 (1 OK / 2 OK some red
4 (1 OK / 2 OK Black
5 (1 OK / 2 OK Black long radial line not cracked
6 (1 OK / 2 OK Black
7 (1 OK / 2 OK Black
8 (1 OK / 2 OK black
9 (1 OK Red / 2 OK Cracked red
10 (1 OK / 2 OK Black
11 (1 OK / 2 OK Black
12 (1 OK / 2 OK Black

All free release

91.6

478E (F') 3-7-16

Dup 478 Even Mould holders Cut with Very Uneven Varnish plates

1 (1 OK filled / 2 OK The 2 Cracks are there, not closed much much worse
2 (1 OK filled / 2 OK The long line has disappeared
3 (1 OK filled / 2 OK show some red in pound
4 (1 OK filled / 2 OK filled
5 (1 OK filled / 2 OK The long line has disappeared
6 (1 OK filled / 2 OK filled
7 (1 OK filled / 2 OK filled
8 (1 OK filled / 2 OK filled
9 (1 OK filled / 2 OK filled Margin Ck ⅛ in wall 2 edge out
10 (1 OK filled / 2 OK filled
11 (1 OK filled / 2 OK filled
12 (1 OK filled / 2 OK filled

100%

2nd Inspection 3-19-16 #1 feed line ck - #9 feed line ck

Transfers - 2nd Round
Bad Var plate

1 (1 OK 2 OK Black.
2 (1 ——— Red spot 1/2" cracked at Edge DISCARD
2 OK
3 (1 OK 2 OK Red - slightly Cooked
4 (1 OK 2 OK Red
5 (1 OK 2 OK Black
6 (1 OK 2 OK Black
7 (1 OK 2 OK slight red
8 (1 OK 2 OK Black
9 (1 OK 2 OK Black red spot 1 1/2" in not cracked
10 (1 OK 2 OK Black
11 (1 OK 2 OK Black
12 (1 OK 2 OK Red

All free release

91.6

3-7-16

478E (G) -

Dup 478 - Even Moulds - very uneven Varnish on plates 2nd round
Prints

1 (1 OK 2 OK filled
2 (1 OK 2 OK filled - the crack of red spot shows, red gone
3 (1 OK 2 OK 90% filled OK
4 (1 OK 2 OK filled red
5 (1 OK 2 OK filled
6 (1 OK 2 OK filled
7 (1 OK 2 OK 90% filled marginal ck 1/4 in
8 (1 OK 2 OK filled
9 (1 OK 2 OK filled
10 (1 OK 2 OK filled
11 (1 OK 2 OK 95% filled OK
12 (1 OK 2 OK filled Red shows in print

100%

2nd Inspection 3-19-16 no change

1 (1 OK 2 OK out on Edge big red spot 1½ dia not ckd

2 (1 OK 2 OK Black

3 (1 OK 2 OK Black

4 (1 OK Red 2 OK Red slight Cook

5 (1 OK 2 OK Black

6 (1 OK 2 OK Black

7 (1 OK 2 OK Black

8 (1 OK red 2 ——— 2, ¼" Cracks from hole -DISCARD

9 (1 OK 2 OK Black

10 (1 OK 2 OK Black

11 (1 OK 2 OK black

12 (1 OK 2 OK Black

91.6

478E (H) #4

Good Mould holders & good Varnish plates, Req 45 cc

Prent

1 (1 OK 80% filled 2 OK 95% - note Transfer.

2 (1 OK 95% filled 2 OK

3 (1 OK 98% filled 2 OK

4 (1 OK filled 2 OK

5 (1 OK filled 2 OK

6 (1 OK filled 2 OK ½ margin cks

7 (1 OK 97% filled 2 OK

8 (1 OK ½ margin cks filled 2 OK The 2 cks about closed - see Transfer

9 (1 OK filled 2 OK

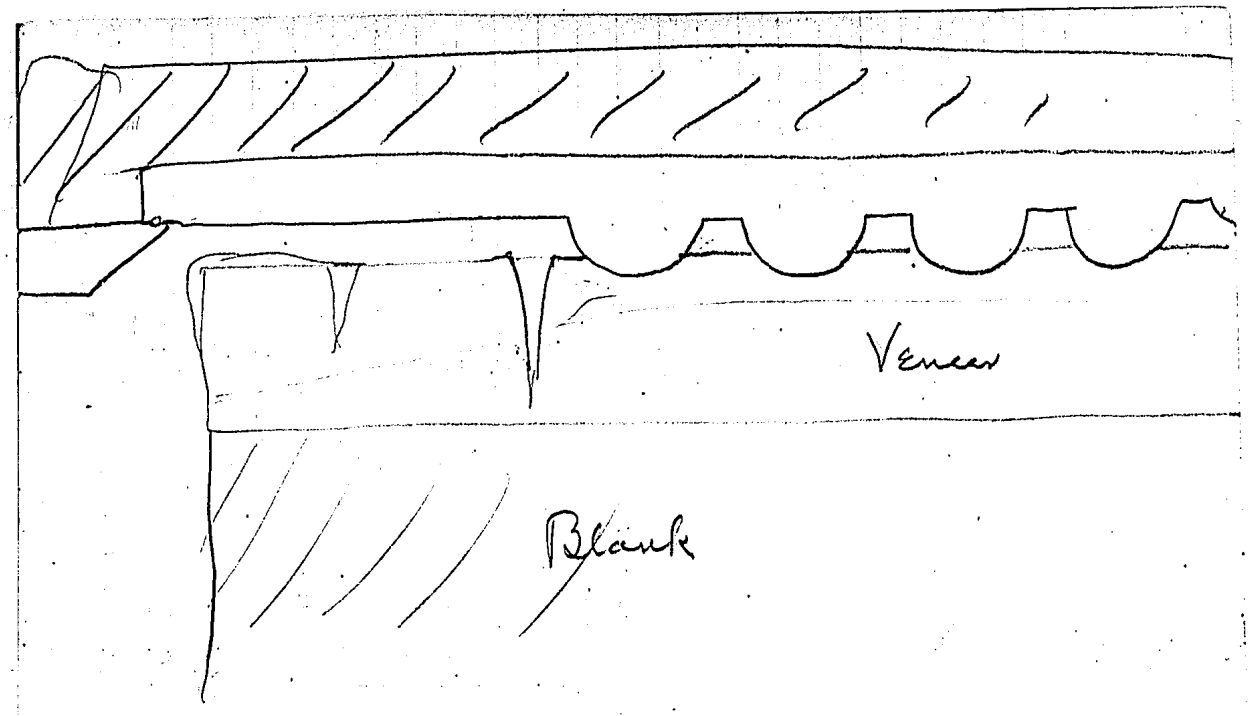
10 (1 OK filled 2 OK -

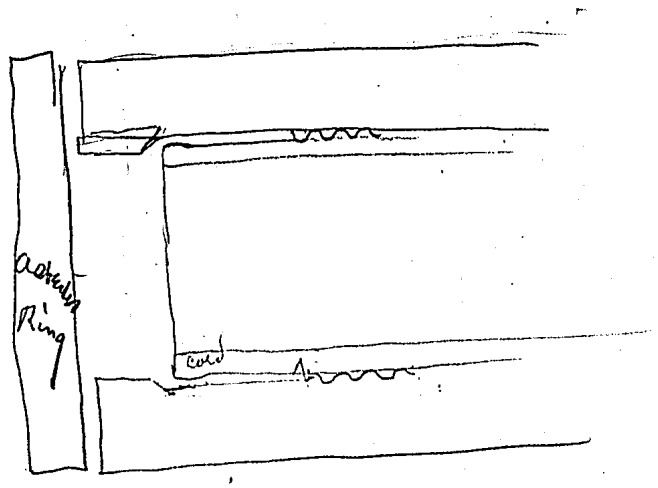
11 (1 OK 80% filled 2 OK 90% filled

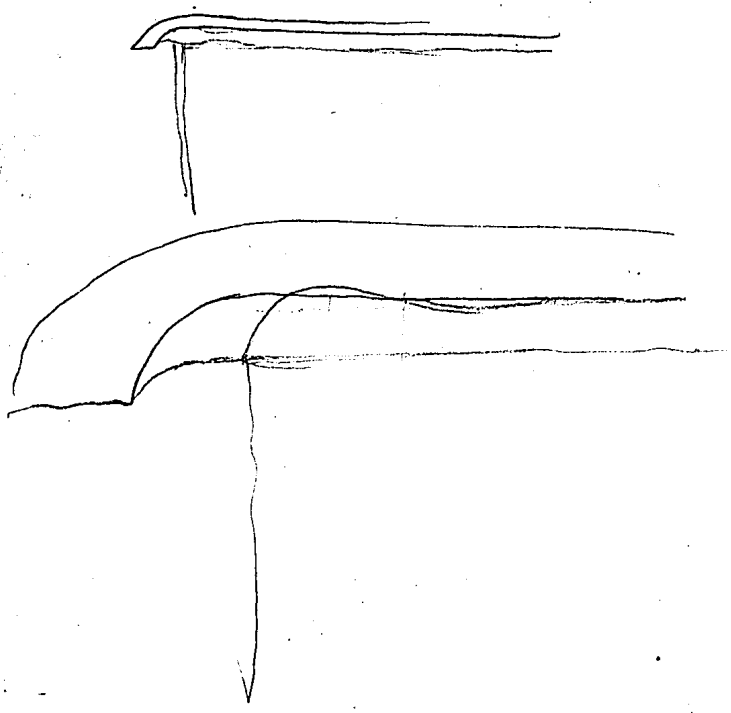
12 (1 OK 95% filled 2 OK

100%

2nd Grapen 3-19-16 #5 feed line ck #6 feed line ck

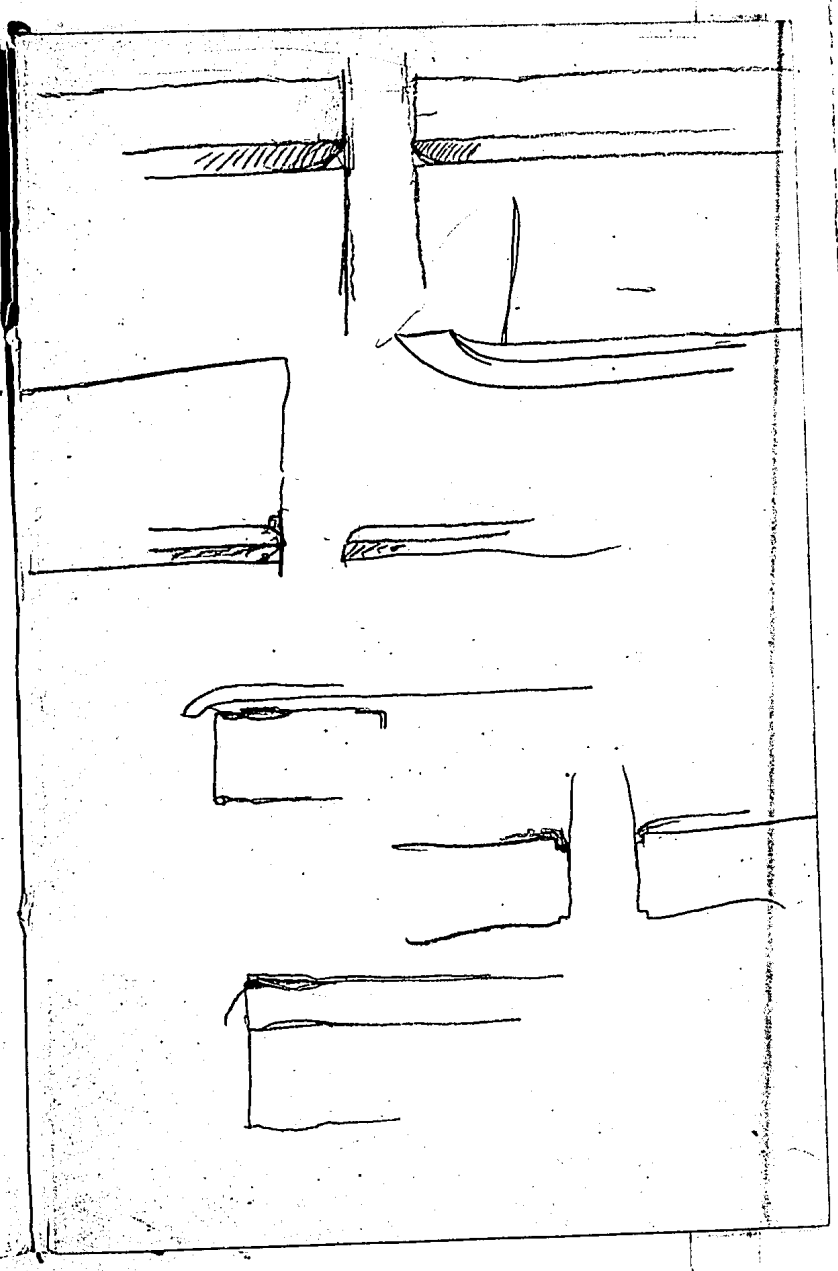

Veneer
Blank


Adhesive Ring
cold



Instances where Cks
Coincide with break of
injury to plates-
No 11

Prut

2 heat,
3 Contact
5 1000
6 cool.

Powder Blank 100 steam
5 in Contact. XX3
3 at 1000 lbs
5 @ 10 Cool